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American Mathematical Society. *Semicentennial addresses of the American Mathematical Society.* A. Dresden, **45,** 50.
Appell, P. *Analyse mathématique.* Vol. 1. *Analyse des courbes, surfaces et fonctions usuelles. Intégrales simples.* 5th edition. Revised by G. Valiron. C. H. Yeaton, **45,** 219. Vol. 2. *Équations différentielles. Développements en séries. Nombres complexes. Intégrales multiples.* 5th edition. H. E. Spencer, **45,** 653.
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Ball, W. W. R. *Mathematical recreations and essays.* 11th edition. Revised by H. S. M. Coxeter. J. S. Frame, **46,** 211.
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—— *Ebene Kinematik.* J. L. Synge, **45,** 814.

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Boehm, C., Rose, E., and Lorenz, P. *Versicherungsmathematische Aufgabensammlung*. Vol. 1. *Beiträge und Deckungsrücklagen in der Lebensversicherung*. Vol. 2. *Umwandlung von Lebensversicherungen*. T. N. E. Greville, **45**, 504.

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British Association for the Advancement of Science. *Mathematical tables*. Vol. 4. *Cycles of reduced ideals in quadratic fields*. Prepared by E. L. Ince. H. T. Engstrom, **43**, 14.

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—— *Mathematical tables*. Vol. 6. *Bessel functions*. Part 1. *Functions of orders zero and unity*. G. R. Clements, **44**, 766.

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Cartan, E. *La méthode du repère mobile, la théorie des groupes continus, et les espaces généralisés*. H. Levy, **41**, 774.

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—— *Leçons sur la théorie des espaces à con-*

nexion projective. J. L. Vanderslice, **44**, 11.

—— *La théorie des groupes finis et continus et la géométrie différentielle traitées par la méthode du repère mobile*. H. Weyl, **44**, 598.

—— *La théorie des spineurs*. W. Givens, **46**, 869.

Caspar, M. See Kepler, J.

Castelnuovo, G. *Le origini del calcolo infinitesimale nell' era moderna*. D. J. Struik, **46**, 376.

Cazalas, E. *Carrés magiques au degré n*. D. N. Lehmer, **41**, 316.

Chazy, J. *Cours de mécanique rationnelle*. Vol. 2. *Dynamique des systèmes matériels*. W. R. Longley, **41**, 13.

Chéron, A. See Borel, É.

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Chisini, O. See Enriques, F.

Church, A. *The calculi of lambda-convergence*. O. Frink, **50**, 169.

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Coble, A. B. See Miller, G. A.

Coe, C. J. *Theoretical mechanics. A vectorial treatment*. J. B. Reynolds, **45**, 346.

Cohen, M. R., and Nagel, E. *An introduction to logic and scientific method*. J. S. Turner, **41**, 6.

Collar, A. R. See Frazer, R. A.

Colloque consacré a la théorie des probabilités. Edited by É. Borel and M. Fréchet. A. H. Copeland, **46**, 723.

Comrie, L. J. See Barlow, P.

Conforto, F. *Superficie razionali*. V. Snyder, **46**, 207.

Contributions to the calculus of variations, 1933–1937. (Theses submitted to the Department of Mathematics at the University of Chicago.) A. Dresden, **44**, 604.

Contributions to the mechanics of solids. J. K. L. MacDonald, **45**, 821.

Conway, A. W. See Hamilton, W. R.

Coolidge, J. L. *A history of geometrical methods*. V. Snyder, **47**, 20.

Copson, E. T. *An introduction to the theory of functions of a complex variable*. E. Hille, **42**, 171.

—— See Baker, B. B.

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Courant, R., and Hilbert, D. *Methoden der mathematischen Physik*. Vol. 2. H. Weyl, **44**, 602.

Courant, R., and Robbins, H. *What is mathematics?* E. T. Bell, **48**, 810.

Coxeter, H. S. M. *Non-euclidean geometry*. L. M. Blumenthal, **49**, 679.

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Davis, H. T. *The theory of linear operators from the standpoint of differential equations of infinite order*. E. Hille, **45**, 220.

—— *The analysis of economic time series*. G. Tintner, **48**, 338.

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—— *New first course in the theory of equations*. B. W. Jones, **45**, 820.

—— *Modern elementary theory of numbers*. C. A. Lester, **46**, 388.

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—— See Julia, G.

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Dirac, P. A. M. *The principles of quantum mechanics.* 2d edition. B. O. Koopman, **42**, 472.

Doehlemann, K. *Projektive Geometrie.* Edited by H. Timerding. B. C. Patterson, **44**, 318.

Doetsch, G. *Theorie und Anwendung der Laplace-Transformation.* R. V. Churchill, **44**, 476.

de Donder, T. *Théorie invariantive de calcul des variations.* H. Busemann, **43**, 598.

Dubreil, P. *Quelques propriétés des variétés algébriques se rattachant aux théories de l'algèbre moderne.* O. Ore, **42**, 618.

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Edel, A. *Aristotle's theory of the infinite.* R. D. Carmichael, **42**, 15.

Einstein, A. *La théorie de la relativité.* Translated by M. Solovine. H. P. Robertson, **41**, 611.

Eisenhart, L. P. *An introduction to differential geometry with use of the tensor calculus.* G. A. Hedlund, **48**, 18.

Engel, F. See Lie, S.

Enriques, F. *Signification de l'histoire de la pensée scientifique.* S. MacLane, **41**, 776.

Enriques, F., and Chisini, O. *Lezioni sulla teoria geometrica delle equazioni e delle funzioni algebriche.* Vol. 4. *Funzioni ellittiche e Abeliane.* A. Emch, **41**, 614.

Enzyklopädie der mathematischen Wissenschaften mit Einschluss ihrer Anwendungen. Vol. 3, part 2A, no. 7. T. R. Hollcroft, **42**, 5. Part 2, no. 8. V. Snyder, **42**, 6. Part 2B, no. 9. A. Black, **42**, 7. Part 2, no. 10. E. C. Rusk, **42**, 7. Part 2B, no. 12. L. A. Dye, **42**, 9. Part 2, no. 13, V. Snyder, **42**, 10. Vol. 1_1, part 1, nos. 2, 4, 5. O. Ore, **48**, 653.

Ertel, H. *Methoden und Probleme der dynamischen Meteorologie.* C. L. Pekeris, **44**, 765.

—— *Elemente der Operatorenrechnung mit geophysikalischen Anwendungen.* A. E. Heins, **47**, 846.

Ezekiel, M. *Methods of correlation analysis.* 2d edition. E. L. Welker, **49**, 347.

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—— *Les théorèmes de la moyenne pour les polynomes.* J. L. Walsh, **43**, 13.

Fenchel, W. See Bonnesen, T.

Festschrift Rudolph Fueter zur Vollendung seines sechzigsten Altersjahres, 30 VI 1940. W. W. Flexner, **47**, 22.

Foradori, E. *Grundgedanken der Teiltheorie.* H. M. MacNeille, **45**, 62.

Ford, W. B. *The asymptotic developments of functions defined by Maclaurin series.* R. E. Langer, **43**, 452.

Forder, H. G. *The calculus of extension.* H. V. Craig, **49**, 524.

Fowler, R. H. *Statistical mechanics.* 2d edition. N. H. Frank, **43**, 601.

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Frazer, R. A., Duncan, W. J., and Collar, A. R. *Elementary matrices and some applications to dynamics and differential equations.* D. C. Lewis, **45**, 825.

Fréchet, M. *L'arithmétique de l'infini.* H. E. Vaughan, **42**, 796.

—— *Généralités sur les probabilités. Variables aléatoires.* D. J. Struik, **43**, 602.

—— *Méthode des fonctions arbitraires. Théorie des événements en chaîne dans le cas d'un nombre fini d'états possibles.* J. A. Greenwood, **45**, 56.

—— *Les probabilités associées à un système d'événements compatibles et dépendants.* Vol. 1. *Événements en nombre fini fixe.* I. Kaplansky, **47**, 23.

—— See *Colloque consacré a la théorie des probabilités.*

Freda, H. *Méthode des caractéristiques pour l'intégration des équations aux dérivées partielles linéaires hyperboliques.* V. C. Poor, **43**, 604.

Frenkel, J. *Wave mechanics. Advanced general theory.* F. D. Murnaghan, **41**, 776.

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Gardner, M. F., and Barnes, J. L. *Transients in linear systems, studied by the*

Laplace transform. Vol. 1. D. V. Widder, **49**, 837.
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Gödel, K. *The consistency of the axiom of choice and of the generalized continuum-hypothesis with the axioms of set theory*. C. C. Torrance, **47**, 191.
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Hamilton, W. R. *The mathematical papers of Sir William Rowan Hamilton*. Vol. 2. *Dynamics*. Edited by A. W. Conway and A. J. McConnell. D. G. Bourgin, **48**, 813.
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—— *Höhere Algebra*. Vol. 2. *Gleichungen höheren Grades*. 2d edition. O. Ore, **44**, 178.
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Hilbert, D. *Gesammelte Werke*. Vol. 3. *Analysis, Grundlagen der Mathematik, Physik, Verschiedenes. Nebst einer Lebengeschichte*. O. Ore, **42**, 798.
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Hilbert, D., and Ackermann, W. *Grundzüge der theoretischen Logik*. 2d edition. J. B. Rosser, **44**, 474.
Hilbert, D., and Bernays, P. *Grundlagen der Mathematik*. Vol. 1. S. MacLane, **41**, 162.
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Hoheisel, G. *Integralgleichungen*. W. R. Longley, **43**, 14.

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—— *Le concours de l'analyse mathématique à l'analyse expérimentale des faits statistiques*. W. D. Baten, **45**, 509.

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Huntington, E. V. *Postulates for assertion, conjunction, negation, and equality*. A. Church, **44**, 177.

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Inglis, C. E. *A mathematical treatise on vibrations in railway bridges*. L. C. Peskin, **41**, 315.

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—— *Theory of probability*. E. L. Dodd, **46**, 739.

Juel, C. *Vorlesungen über projektive Geometrie*. A. Emch, **41**, 171.

Julia, G. *Eléments de géométrie infinitésimale*. 2d edition. D. J. Struik, **43**, 458.

—— *Introduction mathématique aux théories quantiques*. F. D. Murnaghan, **43**, 459.

—— *Cours de cinématique*. 2d edition. Edited by J. Dieudonné. J. W. Campbell, **43**, 600.

—— *Exercises d'analyse*. Vol. 4. C. O. Oakley, **43**, 600.

—— *Introduction mathématique aux théories quantiques*. Part 2. M. H. Stone, **45**, 59.

Juvet, G. *Leçons d'analyse vectorielle*. Part 2. H. B. Phillips, **42**, 791.

Kaczmarz, S., and Steinhaus, H. *Theorie der Orthogonalreihen*. J. D. Tamarkin, **44**, 20.

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Karelitz, G. B., Ormondroyd, J., and Garrelts, J. M. *Problems in mechanics*. P. Franklin, **45**, 824.

von Kármán, T., and Biot, M. A. *Mathematical methods in engineering*. A. Hazeltine, **48**, 646.

Kepler, J. *Gesammelte Werke*. Vol. 1. *Mysterium cosmographicum. De stella nova*. Vol. 2. *Astronomiae pars optica*. Vol. 3. *Astronomia nova*. Edited by M. Caspar and F. Hammer. L. C. Karpinski, **46**, 870.

Kestelman, H. *Modern theories of integration*. J. D. Tamarkin, **44**, 616.

Klein, F. *Elementary mathematics from an advanced standpoint. Geometry*. 3d edition. Translated by E. R. Hedrick and C. A. Noble. G. B. Price, **46**, 733.

Knopp, K. *Elemente der Funktionentheorie*. G. E. Raynor, **43**, 605.

—— See von Mangoldt, H.

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Kostitzin, V. A. *Biologie mathématique*. R. B. Robbins, **43**, 606.

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—— *Grundbegriffe und Hauptsätze der höheren Mathematik, insbesondere für Ingenieure und Naturforscher*. R. P. Kroon, **45**, 505.

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—— *Über einige neuere Fortschritte der additiven Zahlentheorie*. A. J. Kempner,

45, 216.
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—— *A treatise on projective differential geometry.* P. O. Bell, **49**, 840.
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Lavrentieff, M. *Sur les fonctions d'une variable complexe représentables par des séries de polynômes.* I. M. Sheffer, **44**, 22.
Lectures in topology. The University of Michigan conference of 1940. Edited by R. L. Wilder and W. L. Ayres. R. J. Walker, **48**, 203.
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Levi-Civita, T., and Amaldi, U. *Compendio di meccanica razionale.* 2d edition. D. C. Lewis, **47**, 847.
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Lie, S. *Gesammelte Abhandlungen. Geometrische Abhandlungen.* Vols. 1 and 2. Edited by F. Engel and P. Heegaard. O. F. G. Schilling, **45**, 513.
Liebmann, H. *Synthetische Geometrie.* A. Emch, **42**, 477.
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Madelung, E. *Die mathematischen Hilfsmittel des Physikers.* 3d edition. H. Margenau, **42**, 476.
Magnan, A., and Planiol, A. *Sur l'excédent de puissance des insectes.* K. P. Williams, **41**, 174.
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Mandelbrojt, S. *Séries lacunaires.* C. N. Moore, **44**, 313.
von Mangoldt, H. *Einführung in die höhere Mathematik.* 3 vols. 6th edition. Revised and enlarged by K. Knopp. W. R. Longley, **41**, 474.
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Miller, G. A. *The collected works of George Abram Miller.* Vols. 1 and 2. Edited by G. R. Brahana, R. D. Carmichael, and A. B. Coble. H. W. Kuhn, **42**, 785; **45**, 644.

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—— *Technique de la méthode des moindres carrés.* A. H. Copeland, **44**, 766.

Mises, R. v. *Wahrscheinlichkeit Statistik und Wahrheit.* 2d revised edition. Edited by P. Frank and M. Schlick. J. L. Doob, **43**, 316.

—— *Probability, statistics, and truth.* Translated by J. Neyman, D. Scholl, and E. Rabinowitsch. E. L. Dodd, **45**, 815.

Molina, E. C. *Poisson's exponential binomial limit. Table* I: *Individual terms. Table* II: *Cumulated terms.* S. S. Wilks, **49**, 678.

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Morse, M. *The calculus of variations in the large.* A. Dresden, **42**, 607.

Müller, E. *Lehrbuch der darstellenden Geometrie.* 4th edition. Completely revised by E. Kruppa. A. Emch, **42**, 799.

Murnaghan, F. D. *The theory of group representations.* R. Brauer, **47**, 359.

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National Research Council. *Selected topics in algebraic geometry.* II. Supplemental report of the Committee on Rational Transformations: V. Snyder (Chairman), L. A. Dye, A. H. Black. T. R. Hollcroft, **42**, 613.

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O'Hara, C. W., and Ward, D. R. *An introduction to projective geometry.* V. Snyder, **44**, 178.

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—— *Lezioni di analisi matematica.* Part 1. 4th edition. A. Black, **46**, 13.

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Beckenbach, E. F., **41**, 454 (204); **42**, 458 (322), 773 (624); **43**, 754 (613); **44**, 162 (**43**, 770), 308 (185), 750 (490); **45**, 207 (85), 494 (357); **46**, 715 (608); **47**, 340 (203), 520 (381), 845 (692); **48**, 4 (**47**, 705), 5 (**47**, 862), 192 (36), 193 (36); **49**, 199 (42), 343 (218), 832 (536); **50**, 474 (336), 475 (336), 476 (348), 809 (667), (823).
Becker, M. F., **46**, 3 (**45**, 662).
Begle, E. G., **48**, 503 (374).
Bell, C., **42**, 145 (**41**, 798), 293 (176); **43**, 442 (207); **45**, 196 (**44**, 775), 498 (357).
Bell, E. T., **41**, 3 (**40**, 666), 145 (**40**, 811), 148 (**40**, 810), 314 (195), 763 (483); **42**, 145 (**41**, 798), 146 (**41**, 801), 146 (**41**, 802), 461 (316), (486), 601; **43**, 8 (**42**, 823), 441 (202), 442 (207); **44**, 10 (**43**, 774), 10 (**43**, 776), 10 (**43**, 777), 164 (29), 462 (330); **45**, 5; **46**, 8 (28), 568 (407), 568 (407); **47**, 174 (50); **50**, 809 (664).
Bell, J. H., **47**, 521 (201).
Bell, P. O., **41**, 313 (194); **42**, 602 (486); **43**, 6 (**42**, 816), 445 (201); **44**, 8 (**43**, 772), 751 (624); **45**, 806 (663); **46**, 6 (28); **47**, 184 (46); **48**, 336 (216); **50**, 474 (346).
Bergman, S., **44**, 752 (779); **45**, 807 (663); **46**, 197 (36), 578 (408), 580 (602), 865 (750), 867 (750); **47**, 340 (204), 340 (210), 528 (381), 530 (555), 843 (692); **48**, 191 (36), 336 (216), 492 (370), 493 (369), 806 (669), 806 (670); **49**, 199 (51), 342 (219), 830 (692), 832 (851); **50**, 21 (55), 319 (185), 319 (188), 472 (337), 472 (337), 809 (667), (825).
Berkeley, E. C., **42**, 770 (640); **48**, 193 (49).
Bernstein, B. A., **41**, 313 (198); **42**, 460 (314); **43**, 441 (201); **44**, 462 (330); **45**, 497 (357); **46**, 567 (408); **49**, 520 (372); **50**, 319 (54), 476 (333).
Bernstein, D. L., **48**, 501 (361).
Bernstein, F., **43**, 312 (331).
Berry, A. C., **46**, 371 (224).
Berry, G. D. W., **48**, 193 (50).
Bers, L., **47**, 339 (204), 530 (381); **48**, 4 (**47**, 860), 492 (362); **49**, 27 (**48**, 831); **50**, 21 (56), 22 (56).
Best, E., **47**, 844 (688).
Betz, E. E., **45**, 490 (517).
Bewley, L. V., **48**, 184.
Biggerstaff, J., **41**, 146 (**40**, 810).
Bing, R. H., **49**, 832 (536); **50**, 476 (348), 809 (667).
Biot, M. A., **47**, 174 (44).
Bird, M. T., **42**, 459 (187); **43**, 754 (333).
Birkhoff, G., **41**, 3 (**40**, 797), 3 (**40**, 798), 4 (**40**, 798), 4 (**40**, 798), 148 (**40**, 800), 309 (182), 311 (37), 311 (189), 453 (329), 454 (332), 760 (349), 760 (483); **42**, 2 (**41**, 782), 3 (**41**, 636), 162 (26), 293 (43), 293 (44), 453 (340), 772 (490), 775 (344), 775 (344), 775 (487), 775 (624); **43**, 154 (20), 155 (20), 306 (166), 311 (169), 314 (169), 754 (614), 754 (614); **44**, 308 (185), 308 (186), 463, 469 (330), 753 (354); **45**, 340 (86), 341 (86), 808 (357), 808 (517), 809 (663); **46**, 199 (28), 371 (219), 866 (748); **47**, 834, 834, 844 (708); **48**, 169, 180; **49**, 27 (**48**, 831), 830 (859); **50**, 471 (332).
Birkhoff, G. D., **41**, 449, 454 (193), 454 (200), 454 (203); **43**, 753 (627); **45**, 5, 198; **49**, 199 (60).
Birnbaum, W. Z., **46**, 371 (224).
Bissinger, B. H., **49**, 831 (852), 831 (852); **50**, 474 (337).
Bjerknes, J., **47**, 174 (44).

Black, A., **41**, 762 (625), 762 (625), 763 (629).
Black, H. L., **41**, 453 (330).
Blackall, C. J., **45**, 204 (67).
Blake, A., **44**, 751 (491); **46**, 189; **47**, 340 (216).
Blanch, G., **46**, 372 (221); **48**, 337 (213).
Blau, J. H., **45**, 339 (228).
Blichfeldt, H. F., **41**, 314 (196); **43**, 442 (205).
Bliss, G. A., **41**, 147, 459 (343); **42**, 458 (320); **44**, 162 (29); **47**, 834.
Block, W., **41**, 458 (339).
Blumberg, H., **42**, 160 (34), 458 (319); **44**, 753 (639); **47**, 840 (708); **49**, 514 (42).
Blumenthal, L. M., **41**, 311 (37), 311 (38), 454 (201), 761 (485); **42**, 2 (**41**, 634), 159 (34); **43**, 6 (**42**, 805), 7 (**42**, 804), 445 (329), 447 (194); **44**, 8 (**43**, 771); **45**, 204 (68), 496 (357); **46**, 6 (**45**, 832), 571 (602); **47**, 184 (47), 185 (47), 340 (210); **48**, 7 (48), 497; **49**, 832 (866), 832 (866); **50**, 809 (664).
Boas, R. P., **42**, 452 (184); **43**, 752 (469); **44**, 5 (**43**, 765), 306 (186), 467 (330); **45**, 207 (68), 207 (68), 809 (517); **46**, 197 (37), 199 (37), 578 (408), 580 (408), 865 (751), 867 (750); **47**, 185 (34), 339 (204), 841 (556); **48**, 492; **49**, 832 (536); **50**, (824).
Bobonis, A., **50**, 472 (338).
Bochner, S., **41**, 160 (35), 454 (332); **42**, 160 (42), 292 (176), 772 (487); **44**, 306 (186); **45**, 207 (68); **46**, 4 (**45**, 832), 199 (29), 866 (881); **47**, 834; **48**, 175, 191 (37), 193 (30); **49**, 25.
Boelter, L. M. K., **49**, 194.
Boggs, H., **42**, 457 (324).
Bohenblust, H. F., **46**, 7 (29).
Bohr, H., **45**, 205 (86).
Bosanquet, L. S., **41**, 761 (485).
Botts, T. A., **47**, 843 (562).
Bourgin, D. G., **42**, 161 (33), 162 (34); **43**, 7 (**42**, 820); **46**, 6 (29), 6 (29), 196 (37), 864 (881); **47**, 528 (556), 840 (693); **48**, 4 (**47**, 711); **49**, 199 (60), 199 (60), 519 (373); **50**, 31 (56).
Bowden, J., **49**, 343 (216).
Bower, O. K., **45**, 341 (86), 341 (87).
Bradshaw, J. W., **48**, 192 (37).
Brahana, H. R., **41**, 458 (340).
Brandt, A. J., **50**, 31 (**49**, 849).
Branson, H. R., **49**, 514 (369).
Brauer, A. T., **46**, 3 (**45**, 833), 198 (37), 866 (751); **47**, 4 (**46**, 891), 841 (690); **49**, 514 (361); **50**, 32 (56).
Brauer, R., **41**, 161 (34); **42**, 772 (625), 775 (624), 775 (625); **44**, 5 (**43**, 766), 468 (330), 752 (624); **45**, 489 (358), 808 (663); **46**, 200 (38), 579 (408); **47**, 521 (373), 842 (684), 845 (684); **48**, 493 (356).
Bray, H. E., **41**, 314 (198); **43**, 154 (20).
Breit, G., **41**, 151 (307).
Brenner, J. L., **42**, 775 (487); **43**, 155 (**42**, 812), 446 (196); **44**, 460 (331); **46**, 567 (409); **50**, 30 (51).
Brinkmann, H. W., **45**, 48 (**44**, 772).
Bristow, L., **45**, 48 (**44**, 785).
Brown, A. B., **41**, 3 (**40**, 794), 311 (38), 311 (38); **43**, 312 (169), 314 (170); **46**, 371 (224); **47**, 4 (**46**, 891); **48**, 4 (**47**, 860).
Brown, E. W., **41**, 450.
Brown, G. W., **46**, 865 (881).
Brown, H. K., **48**, 806 (522).
Brown, O. E., **45**, 194 (**44**, 780).
Browne, E. T., **41**, 763 (486); **43**, 754 (614); **44**, 469 (331).
Bruck, R. H., **47**, 184 (30), 528 (373), 528 (374), 844 (684), 844 (684); **48**, 7 (**47**, 856), 191 (30), 193 (30), 195 (34); **49**, 201 (41); **50**, 31 (**49**, 849), 31 (52), 474 (333), 475 (333), (821), (821).
Brunk, H. D., **50**, 472 (338), 475 (339), 476 (338).
Buchanan, H. E., **41**, 760 (488).
Buck, R. C., **50**, 21 (**49**, 853), 22 (**49**, 852), 22 (**49**, 852), 22 (**49**, 864).
Buell, E. L., **47**, 845 (703).
Burcham, P. B., **47**, 521 (382).
Burington, R. S., **41**, 157 (**40**, 801), 761 (490); **42**, 772 (625); **45**, 194 (**44**, 780), 811 (664); **46**, 716 (608).
Burr, I. W., **47**, 839 (709).
Busemann, H., **46**, 867 (751); **48**, 502 (371); **49**, 832 (695); **50**, 809 (674).
Bush, L. E., **46**, 372 (225).
Bush, V., **42**, 150.
Bushey, J. H., **46**, 370 (225); **48**, 492 (374). 493 (374), 493 (374).
Byerly, P., **46**, 189.

Cairns, S. S., **41,** 159 (**40,** 801); **43,** 313 (170), 754 (469); **45,** 340 (228); **46,** 4 (**45,** 664), 579 (603); **48,** 4 (**47,** 711), 4 (**47,** 711).
Cairns, W. D., **42,** 454 (326); **45,** 198.
Calkin, J. W., **43,** 312 (170), 448 (199), 751 (615); **44,** 164 (30), 306 (186); **45,** 207 (68); **46,** 197 (38), 572 (400), 572 (400), 572 (400).
Callaghan, M. P., **46,** 372 (225).
Cameron, E. A., **43,** 153 (21).
Cameron, R. H., **41,** 3 (**40,** 795), 157 (21), 309 (182); **42,** 162 (37); **43,** 152 (21), 152 (21); **44,** 5 (**43,** 766); **45,** 204 (69), 489 (358), 809 (517); **46,** 372 (225); **47,** 840 (693); **49,** 27 (**48,** 666), 343 (218), 513, 831 (688); **50,** 471 (339), 808 (667), 809 (668).
Camp, B. H., **42,** 450; **44,** 164 (30).
Camp, C. C., **41,** 148 (**40,** 808), 148 (**40,** 808); **42,** 774 (497, 827); **43,** 6 (**42,** 820); **45,** 495 (358); **47,** 184 (30), 844 (693).
Campaigne, H. H., **44,** 459 (331); **45,** 206 (69), 494 (358), 807 (664); **46,** 572 (409), 573 (409); **47,** 840 (685).
Campbell, A. D., **41,** 311 (189); **42,** 292 (176); **47,** 842 (685); **48,** 4 (**47,** 856).
Campbell, J. W., **41,** 311 (38), 760 (349).
Cannon, E. W., **41,** 157 (22).
Carathéodory, C., **43,** 5.
Carlitz, L., **41,** 452 (327), 763 (487), 763 (487), 763 (487), 763 (631); **42,** 162 (35), 293 (177), 293 (177), 293 (177), 452 (326), 772 (498), 775 (498); **43,** 153 (21), 155 (21), 155 (22), 313 (171), 314 (171), 751 (470); **46,** 200 (38), 200 (38), 580 (409), 580 (409), 860, 867 (882); **47,** 187 (50), 530 (380), 530 (380), 530 (554), 845 (690), 845 (690); **48,** 193 (35), 493 (357), 806 (825), 806 (825).
Carmichael, R. D., **42,** 150, 459 (186), 459 (186), 459 (186), 459 (187).
Carnap, R., **42,** 764 (642).
Carpenter, A. F., **42,** 602 (345); **44,** 468 (331).
Carroll-Rusk, E. See Rusk, E. C.
Carruth, P. W., **47,** 843 (685).
Carslaw, H. S., **44,** 753 (493).
Cartan, E. J., **42,** 764.
Cassity, C. R., **44,** 458 (196); **45,** 490 (518); **47,** 184 (47).
Caton, W. B., **50,** 30 (56).
Cell, J. W., **44,** 469 (331).
Chanler, J. H., **43,** 157 (40), 756 (626).
Chatland, H., **43,** 446 (327); **44,** 460 (197).
Chern, S. S., **50,** 318 (189), 471 (346).
Chevalley, C., **50,** 31 (52), 809 (674).
Chien, W. Z., **50,** 476.
Chittenden, E. W., **42,** 765; **46,** 5.
Christie, D. E., **49,** 199 (60).
Chou, P. Y., **50,** 161.
Church, A., **41,** 453 (332), 454 (332), 761 (627); **42,** 770 (639); **43,** 755 (333); **44,** 155; **45,** 490 (234); **48,** 193 (50).
Church, R., **46,** 580 (409).
Church, W. R., **41,** 453 (329).
Churchill, R. V., **41,** 159 (28); **42,** 160 (26), 774 (490); **43,** 446 (191), 753 (470); **44,** 9 (**43,** 771), 164 (30), 752 (624); **45,** 494 (359); **46,** 570 (406), 570 (410), 573 (410).
Churchman, C. W., **50,** 319 (191), 472 (347), 808 (678).
Civin, P., **46,** 578 (410); **48,** 336 (220), 492 (376).
Clark, A. G., **46,** 568 (410).
Clark, C. E., **44,** 753 (625).
Clark, C. L., **50,** 319 (192).
Clarkson, J. A., **41,** 309 (39); **42,** 292 (177); **44,** 750 (484); **48,** 805 (666).
Clarkson, J. M., **41,** 158 (23); **43,** 152 (22); **44,** 165 (31); **46,** 579 (411).
Clauser, F. H., **47,** 174 (210).
Claytor, W. S., **43,** 153 (22); **44,** 460 (332).
Clifford, A. H., **47,** 341 (201), 341 (201), 530 (553).
Clippinger, R. F., **46,** 198 (38); **48,** 503 (357); **49,** 199 (43), 199 (43), 199 (43).
Coble, A. B., **41,** 150; **45,** 487.
Coburn, N., **46,** 372 (219), 372 (220); **47,** 186 (47), 186 (47), 517 (393), 843 (705); **48,** 9 (48), 336 (217), 336 (217); **49,** 27 (**48,** 832), 343 (219); **50,** 319 (185), 810 (672).
Cohen, I. S., **48,** 193 (31); **49,** 199 (37).
Cohen, L. W., **41,** 159 (28); **42,** 148 (**41,** 793); **43,** 154 (23), 445 (201); **45,** 206 (69), 490 (359); **46,** 198 (39); **48,** 806 (828); **49,** 519 (362); **50,** 30 (61).
Cole, N., **46,** 580 (411).
Cole, R. H., **46,** 867 (751).
Coleman, A. J., **50,** 810 (673), 810 (673).

Coleman, J. B., 47, 839 (710).
Colvin, B. H., 50, 32 (57).
Comenetz, G., 42, 2 (41, 784); 43, 3 (42, 806), 3 (42, 806); 45, 341 (87); 48, 4 (47, 863).
Comfort, E. G. H., 43, 151 (23).
Coolidge, J. L., 46, 580 (603).
Copeland, A. H., 41, 158 (26), 761 (629); 42, 162 (24); 43, 445 (192); 44, 7, 162 (31); 46, 198 (39); 47, 530 (394); 50, 30 (61).
Coral, M., 45, 194 (44, 781); 49, 193 (43).
Courant, R., 41, 158 (24); 42, 773 (642); 43, 312 (171); 44, 307 (187); 45, 48 (44, 772), 48 (44, 772), 206 (70); 46, 371 (225), 580 (603); 47, 187 (48), 524, 529 (382).
Court, N. A., 42, 161 (28); 43, 157 (41); 47, 184 (48), 186 (48); 48, 193 (48).
Cowan, R., 47, 184 (34).
Cowgill, A. P., 41, 148 (40, 807).
Cowling, V., 49, 832 (536).
Coxeter, H. S. M., 41, 453 (328); 43, 754 (470); 44, 468 (187), 751 (625); 45, 806 (664); 46, 200 (38), 579 (411); 48, 806 (670); 49, 199 (60).
Craig, A. T., 41, 149 (40, 807), 759 (621); 42, 459 (323); 44, 8 (28).
Craig, C. C., 41, 159 (26), 759 (621), 761 (621).
Craig, H. V., 41, 4 (40, 799); 43, 755 (615); 45, 194 (44, 781); 46, 867 (752).
Cramér, H., 45, 342 (359).
Cramlet, C. M., 41, 157 (34), 160 (35), 161 (35); 42, 602 (483), 603 (483); 46, 715 (749).
Crout, P. D., 46, 579 (229).
Crow, E. L., 47, 520 (382).
Culver, M. M., 41, 157 (22), 758 (623).
Curry, H. B., 42, 161 (23); 43, 155 (23), 313 (171), 752 (615); 44, 163 (31); 46, 579 (411), 866 (882), 867 (752), 867 (752); 47, 3; 50, 31 (49, 859).
Curtiss, J. H., 41, 158 (25), 760 (624); 42, 158 (29), 162 (30); 43, 752 (466); 44, 5 (43, 766); 46, 866 (609); 47, 185 (34), 186 (34), 841 (556); 48, 4 (47, 710); 49, 200 (58).

Daly, J. F., 43, 152 (42, 812); 47, 839 (864).
Dancer, W., 41, 459 (342).
Dantzig, G. B., 46, 567 (412), 568 (412); 47, 517 (395).
Dantzig, T., 42, 148 (41, 795).
Daoust, J. H., 44, 8 (43, 772).
Darkow, M. D., 45, 207 (44, 786).
Daus, P. H., 43, 8 (42, 821), 9 (42, 825); 44, 10 (43, 776), 462 (332); 46, 567 (412).
Davids, N., 46, 371 (225); 48, 5 (47, 704).
Davis, H. A., 41, 762 (625), 763 (629).
Davis, H. T., 41, 151, 158 (25); 44, 164 (31).
Davis, R., 45, 811 (674).
Day, M. M., 44, 752 (625); 46, 370 (226), 372 (226), 580 (413), 580 (413), 867 (748); 47, 6 (46, 748), 6 (46, 891), 840 (694), 844 (693), 844 (693); 48, 503 (375); 49, 518 (218), 832 (688); 50, 31 (52), 471 (339), 475 (339), 475 (339).
DeCicco, J., 42, 453 (326); 43, 312 (331); 44, 5 (43, 766), 165 (32), 165 (35), 165 (35), 307 (187), 308 (190), 751 (485), 753 (355), 753 (485); 45, 48 (44, 640), 195 (44, 781), 340 (87), 340 (230), 341 (87), 491 (365), 809 (518), 809 (518), 810 (669); 46, 4 (45, 829), 4 (45, 830), 371 (39), 372 (39), 371 (47), 372 (47), 580 (413), 581 (421), 867 (749); 47, 187 (214), 340 (213), 341 (211), 341 (212), 341 (213), 521 (211), 522 (211), 522 (213), 530 (210), 839 (706), 843 (393), 843 (560), 843 (560), 843 (560), 843 (707); 48, 4 (47, 863), 336 (217), 336 (218), 336 (218), 806 (671), 807 (672); 49, 26 (48, 833), 27 (48, 670), 200 (54), 200 (55), 343 (220), 514 (371), 514 (371), 518 (220), 832 (695); 50, 21 (49, 697), 29 (49, 864), 31 (49, 864), 318 (190), 319 (190), 472 (500), 810 (674).
Dehn, M., 47, 841 (711).
Deming, W. E., 48, 801.
Den Hartog, J. P., 47, 524.
Dennis, J. J., 50, 810 (668).
Derry, D., 45, 494 (234); 47, 184 (51).
Diamond, A. H., 44, 10 (43, 775); 46, 189 (40).
Dickson, L. E., 41, 161 (36), 460 (348); 42, 2 (41, 795), 149 (41, 793), 458 (341), 459 (341), 764; 43, 447 (327).
Diehl, H., 47, 187 (209).
Dilworth, R. P., 44, 9 (43, 773), 461 (353), 462 (332), 754 (625); 45, 196 (44, 775),

342 (92), 495 (92), 809 (518), 809 (519); **46,** 4 (45, 833), 4 (45, 833), 197 (40), 370 (226); **48,** 9 (31), 9 (31), 191 (31), 493 (357), 805 (825); **49,** 514 (361); **50,** 161 (52).
Dimsdale, B., **45,** 806 (665).
Dines, L. L., **42,** 147; **44,** 752 (633); **45,** 805 (675); **47,** 184 (35); **48,** 193 (210); **49,** 343 (217).
DiPaola, J., **50,** 809 (500).
Dix, C. H., **44,** 462 (332), 462 (333).
Dobbie, J. M., **44,** 459 (197); **45,** 194 (44, 782); **46,** 716 (608); **47,** 841 (690).
Dodd, E. L., **43,** 155 (23), 306 (42), 314 (172); **44,** 5 (43, 627); **46,** 580 (414), 716 (609).
Doob, J. L., **41,** 3 (40, 798), 159 (27); **42,** 770 (490); **43,** 446 (327); **45,** 494 (359); **46,** 4 (45, 833), 198 (40), 570 (414); **48,** 193 (37).
Doole, H. P., **42,** 459 (320).
Douglas, J., **42,** 773 (343); **44,** 754 (487), 754 (487), 754 (491), 754 (491); **45,** 48 (44, 640), 48 (44, 640), 48 (44, 640), 48 (44, 785), 207 (44, 787); **46,** 581 (414); **47,** 186 (35); **48,** 336 (218); **49,** 200 (55), 343 (370); **50,** 318 (180).
Downs, T. L., **42,** 161 (30).
Doyle, T. C., **49,** 521 (538).
Doyle, W. C., **43,** 448 (200), 751 (333).
Dresch, F. W., **43,** 442 (204); **46,** 568 (414).
Dresden, A., **41,** 151; **44,** 307 (187).
Dresden, M., **49,** 517 (369); **50,** 474 (344).
Dresher, M., **44,** 306 (188).
Dressel, F. G., **41,** 309 (39), 454 (333), 758 (628), 762 (619); **42,** 148 (41, 789); **43,** 151 (24); **45,** 490 (360); **46,** 370 (227), 372 (226); **48,** 493 (362).
Dribin, D. M., **41,** 760 (628); **43,** 152 (24), 306 (166), 751 (616); **44,** 468 (333); **45,** 493 (360); **46,** 571 (415); **47,** 522 (374).
Dubisch, R., **46,** 572 (401); **50,** 161 (53).
Dudley, D. W., **49,** 831 (859).
Duffin, R. J., **43,** 7 (42, 820); **44,** 459 (333), 459 (349), 752 (626); **45,** 493 (234), 808 (680); **46,** 6 (29), 196 (41), 570 (415); **47,** 521 (383), 839 (694), 840 (685), 841 (694); **49,** 514 (362); **50,** 809 (496), 810 (495).
Duncan, D. C., **41,** 146 (18), 146 (18).
Dunford, N., **41,** 454 (331), 455 (333); **42,** 3 (41, 782), 3 (41, 782), 293 (178), 293 (178), 454 (327); **43,** 155 (24), 155 (24); **44,** 308 (197); **45,** 206 (88); **47,** 834; **48,** 181; **49,** 513, 514 (536), 832 (853); **50,** 810 (668).
Duntley, S. Q., **49,** 24.
Duren, W. L., **41,** 760 (488); **42,** 770 (491); **43,** 152 (42, 812); **44,** 165 (32).
Durfee, W. H., **49,** 831 (687).
Dushnik, B., **41,** 760 (621); **44,** 458 (333); **45,** 811 (829); **46,** 571 (415); **47,** 6 (52).
Duthie, W. D., **45,** 48 (44, 640); **47,** 185 (30).
Dutka, J., **49,** 514 (370).
Dwyer, W. A., **43,** 448 (185), 448 (185).
Dye, L. A., **41,** 4 (40, 664), 158 (40, 802), 311 (190); **42,** 148 (41, 790), 293 (178), 454 (327); **43,** 152 (24); **45,** 204 (70), 489 (360).
Dyer-Bennet, J., **45,** 808 (357); **46,** 866 (753).

Eachus, J. J., **46,** 196 (41), 570 (415); **47,** 185 (35), 841 (694).
Earl, J. M., **44,** 459 (334); **47,** 841 (695).
Eaton, J. E., **44,** 306 (188); **45,** 340 (228), 809 (520); **46,** 3 (45, 665), 579 (604); **49,** 514 (361).
Eddington, A. S., **42,** 765.
Eilenberg, S., **46,** 197 (41), 198 (41), 200 (41), 200 (41), 571 (416), 573 (416), 579 (416), 866 (882), 867 (882); **47,** 6 (35), 185 (52), 187 (53), 521 (397), 529 (398), 530 (398), 841 (866); **48,** 193 (54), 805 (836); **49,** 518 (61); **50,** 30 (53), 474 (349), 809 (679).
Einstein, A., **41,** 150.
Eisenhart, C., **44,** 164 (32).
Eisenhart, L. P., **42,** 776 (625).
Elconin, V., **41,** 146 (40, 815), 146 (40, 814), 313 (197), 314 (194); **42,** 146 (41, 800), 146 (41, 803), 461 (318); **43,** 8 (42, 823), 9 (42, 826), 9 (42, 826), 9 (42, 826), 442 (203), 442 (207), 443 (208).
Ellis, W., **50,** 31 (53).
Emch, A., **42,** 148 (41, 791); **43,** 7 (42, 818), 9 (42, 825), 153 (42, 813); **44,** 458 (197), 751 (626).
Emch, A. F., **42,** 770 (640).
Emery, E. W., **43,** 6 (42, 817).
Emmons, H. W., **50,** 318.

Engelbrecht, A. E., 48, 7 (44).
Engstrom, H. T., 42, 292 (179), 293 (178), 453 (327); 45, 342 (235).
Epstein, B., 45, 808 (665); 46, 200 (41), 864 (881), 866 (753); 47, 521 (383); 50, 319 (191), 472 (347), 808 (678).
Epstein, P. S., 49, 194.
Erdös, P., 47, 341 (217), 845 (695); 48, 805 (666); 49, 831 (853); 50, 30 (57), 474 (332), (669).
Erskine, W. H., 41, 159 (28).
Escott, E. B., 41, 460 (344).
Ettlinger, H. J., 41, 149 (40, 806); 42, 160 (28), 161 (22); 48, 193 (37).
Ettlinger, M. G., 49, 343 (221).
Evans, G. C., 41, 161 (32), 314 (198); 42, 460 (314), 765; 43, 157 (165); 44, 155; 45, 5; 46, 866 (753); 47, 176.
Evans, H. P., 43, 445 (188).
Everett, C. J., 47, 186 (31), 843 (553); 48, 807 (522); 49, 27 (48, 826), 832 (535); 50, 811 (496).
Eves, H. W., 50, 810 (665), 810 (675), 810 (675), (825).
Ewing, G. M., 43, 6 (42, 817), 446 (196); 44, 8 (43, 772); 48, 501 (364); 49, 193 (44), 832 (689).

Farrell, O. J., 43, 751 (616).
Favila, R. A., 45, 497 (360).
Federer, H., 50, 22 (49, 853), 22 (49, 854), 476 (340).
Fejer, L., 41, 763 (632).
Fekete, M., 41, 310 (185).
Feld, J. M., 41, 314 (195); 43, 7 (42, 816), 306 (43); 44, 307 (50), 469 (334); 45, 340 (229), 490 (361); 46, 573 (416); 47, 340 (212); 50, 318 (189).
Feller, W., 46, 371 (227); 47, 842 (710); 48, 807 (828); 49, 343 (59), 343 (59), 831 (865).
Fialkow, A., 41, 310 (39); 42, 292 (179), 454 (328); 43, 3 (42, 807), 306 (43), 314 (172), 755 (471), 755 (616); 44, 5 (43, 628), 307 (50), 754 (491); 46, 2 (45, 834); 47, 4 (46, 891), 340 (212); 48, 493 (372).
Ficken, F. A., 45, 48 (44, 772), 811 (665); 47, 528 (562), 840 (712); 48, 493 (357); 49, 832 (363), 833 (363).
Finan, E. J., 41, 3 (40, 795); 42, 2 (41, 783).
Fine, N. J., 50, 31 (54).
Fischer, C. H., 41, 159 (27).
Fisher, R. A., 42, 764.
Fitch, F. B., 42, 770 (641).
Fite, W. B., 50, 472 (333).
Flanders, D. A., 45, 205 (86).
Fleddermann, H. T., 46, 866 (753).
Flexner, W. W., 44, 162 (32), 753 (626), 754 (627); 45, 207 (70); 48, 192 (52).
Flood, M. M., 41, 310 (39); 42, 292 (179); 43, 155 (25), 312 (172); 44, 163 (33).
Folley, K. W., 47, 6 (36).
Foote, W. R., 48, 806 (832).
Ford, L. R., 42, 160 (35); 43, 6; 44, 458 (336); 45, 205 (70); 46, 5; 47, 839 (695).
Forsyth, C. H., 41, 314 (196); 44, 165 (43, 770); 46, 867 (883).
Forsythe, G. E., 47, 4 (46, 892), 530 (395); 48, 495 (212); 49, 833 (692).
Fort, T., 42, 3 (41, 783); 43, 752 (471); 44, 307 (188); 45, 48 (44, 773); 46, 370 (227); 48, 192 (47, 857); 49, 831 (689).
Foster, A. L., 43, 442 (203); 44, 461 (334); 46, 7 (30); 50, 319 (54), 476 (333), (822).
Foster, M. C., 41, 310 (186); 46, 3 (45, 834); 47, 341 (212).
Foster, R. M., 43, 3 (42, 626); 49, 200 (51).
Fox, A. H., 41, 455 (333); 49, 200 (51), 342 (369).
Fox, J., 41, 310 (186).
Fox, R. H., 42, 292 (180); 47, 841 (712); 49, 518 (373); 50, 30 (49, 867).
Frame, J. S., 41, 3 (40, 796), 160 (32), 760 (619); 42, 771 (623); 44, 307 (188); 46, 866 (754); 48, 493 (357).
Frankel, L. R., 44, 165 (34).
Franklin, P., 42, 3 (41, 783), 452 (328), 773 (491); 43, 2; 44, 5 (43, 767), 467 (334).
Fried, H., 49, 831 (853).
Friedman, B., 43, 753 (471); 44, 459 (335), 753 (627); 45, 806 (666); 47, 841 (695); 50, 31 (49, 859).
Friedrichs, K. O., 43, 4 (42, 810), 751 (616); 44, 750 (627); 45, 205 (70); 46, 864 (754); 47, 529 (559); 49, 344 (52); 50, 319 (180), 464.
Frink, A. H., 42, 771 (491); 44, 467 (198).
Frink, O., 41, 158 (40, 802); 42, 776 (492); 44, 467 (198); 46, 864 (754); 47, 844 (712).
Frissel, H. F., 50, 809 (500).
Fry, C. G., 49, 200 (45).

Fuller, F. B., **42**, 293 (183).
Fuller, G., **43**, 6 (**42**, 819).
Fulton, D. G., **43**, 446 (190).

Gaba, M. G., **41**, 149 (**40**, 809).
Gage, W. H., **44**, 754 (493).
Galbraith, A. S., **45**, 489 (361).
Garabedian, H. L., **44**, 460 (335); **45**, 207 (88); **46**, 199 (**45**, 834), 200 (42), 572 (227), 867 (749); **47**, 185 (36), 341 (205), 844 (696), 844 (696); **48**, 336 (212); **50**, 319 (186).
García, M., **50**, 319 (192), 810 (679).
Garrison, G. N., **46**, 200 (42).
Garver, R., **41**, 145 (**40**, 812), 310 (188); **42**, 146 (**41**, 801).
Gaskell, R. E., **46**, 570 (417); **48**, 193 (45); **49**, 832 (860).
Gatewood, B. E., **45**, 806 (666); **47**, 184 (45).
Gehman, H. M., **41**, 762 (629).
Geiringer, H. P., **46**, 864 (883); **47**, 842 (865); **48**, 492 (370); **49**, 342 (52).
Gelbart, A., **46**, 3 (**45**, 834), 197 (42), 581 (417), 864 (755); **47**, 339 (205), 845 (696); **48**, 193 (37), 336 (212), 493 (371); **49**, 27 (**48**, 831); **50**, 21 (56), 22 (56).
Gentry, F. C., **44**, 754 (485), 754 (485); **45**, 341 (229).
George, T. S., **46**, 3 (**45**, 835).
Gere, B. H., **48**, 807 (671).
Gergen, J. J., **42**, 454 (328); **43**, 752 (335); **46**, 2.
Gerhardt, H., **44**, 751 (493).
Ghent, K. S., **41**, 148 (**40**, 807).
Giese, J. H., **47**, 840 (706).
Gilbert, P. W., **46**, 4 (**45**, 835), 200 (42).
Gilchrist, L., **46**, 189.
Gill, B. P., **41**, 452 (327).
Girshick, M. A., **43**, 312 (172).
Givens, J. W., **44**, 306 (189); **45**, 194 (**44**, 782).
Glass, T. F., **47**, 842 (696).
Glenn, O. E., **43**, 757 (627); **44**, 753 (627).
Gleyzal, A., **46**, 198 (43).
Gödel, K., **45**, 204 (93).
Goheen, H. E., **46**, 715 (609).
Goldberg, M., **42**, 3 (**41**, 783); **46**, 4 (**45**, 666); **50**, 472 (186).
Goldstine, H. H., **43**, 155 (25), 447 (186), 448 (329), 755 (617); **44**, 9 (**43**, 771), 459 (335); **45**, 494 (361), 496 (363); **46**, 571 (417); **47**, 341 (205), 520 (383).
Golomb, M., **46**, 579 (418).
Gonzalez-Dominguez, A., **46**, 580 (603).
Goodman, N., **48**, 193 (50).
Gordon, R. D., **48**, 9 (52).
Gore, G. D., **43**, 6 (**42**, 817); **45**, 495 (361).
Gorn, S., **44**, 750 (335); **45**, 207 (71), 207 (71); **47**, 4 (**46**, 892).
Gottschalk, W. H., **48**, 807 (523); **50**, 319 (192), 809 (680), 810 (501), 810 (680).
Gould, S. H., **49**, 832 (692).
Grant, H. S., **41**, 761 (489).
Graustein, W. C., **42**, 161 (42), 161 (42), 773 (487); **43**, 312 (331); **46**, 201 (220).
Gravalos, F. G., **47**, 529 (559).
Graves, C. H., **43**, 152 (25).
Graves, L. M., **41**, 457; **42**, 292 (180), 452 (329), 774 (626); **45**, 494 (235), 810 (666), 810 (667); **49**, 193 (61).
Green, J. W., **44**, 9 (**43**, 773), 308 (51), 462 (336); **47**, 183 (36).
Green, L. J., **43**, 445 (192); **44**, 754 (628); **46**, 867 (755).
Greenberg, H. J., **48**, 336 (212); **49**, 342 (220).
Greenwood, J. A., **43**, 152 (37), 312 (173), 754 (617); **47**, 529 (395).
Greenwood, R. E., **47**, 185 (36).
Greville, T. N. E., **45**, 489 (362); **48**, 805 (834).
Griffin, F. L., **44**, 307 (189).
Griffin, H. M., **46**, 200 (43).
Griffiths, L. W., **42**, 772 (498); **44**, 165 (33); **47**, 521 (380).
Grove, C. C., **41**, 310 (187).
Grove, V. G., **41**, 763 (485); **42**, 457 (185); **43**, 447 (198); **45**, 193; **47**, 521 (393); **49**, 831 (696); **50**, 31 (63).
Gumbel, E. J., **48**, 4 (**47**, 865), 805 (673); **49**, 831 (698, 939); **50**, 319 (191), 808 (678).

Haberzetle, M. B., **44**, 459 (336).
Hadamard, J., **49**, 514 (370).
Hahn, J. W., **44**, 458 (336).
Hailperin, T., **49**, 832 (697).
Haimo, F., **50**, 22 (**49**, 37).
Hall, D. W., **42**, 293 (180); **43**, 153 (**42**,

813); **44,** 9 (**43,** 774), 461 (336); **45,** 48 (**44,** 773), 196 (**44,** 776), 204 (88), 207 (71), 490 (519), 807 (829), 808 (667), 810 (667); **46,** 199 (220), 579 (604), 866 (883), 867 (755); **48,** 194 (53), 806 (675); **49,** 833 (867); **50,** 319 (193).

Hall, M., **41,** 310 (40), 311 (40), 453 (327), 455 (334); **42,** 159 (25), 772 (488); **43,** 313 (173); **44,** 469 (337); **45,** 48 (**44,** 628), 489 (362); **46,** 864 (755); **47,** 340 (201); **48,** 191 (31).

Hall, N. A., **42,** 146 (**41,** 801); **43,** 441 (202), 442 (206); **44,** 9 (**43,** 773), 461 (337), 752 (488); **47,** 4 (**46,** 892); **49,** 343 (44).

Hall, P., **42,** 776 (642); **43,** 755 (336), 757 (617).

Haller, M. E., **42,** 602 (346).

Hallett, E., **50,** (827).

Halmos, P. R., **44,** 164 (**43,** 770), 468 (337); **45,** 808 (667); **46,** 371 (221), 865 (755); **47,** 339 (206), 842 (696); **48,** 493 (523); **49,** 200 (37), 518 (363); **50,** 30 (63), 471 (348).

Halperin, I., **43,** 153 (37), 154 (38), 312 (173); **44,** 307 (189); **45,** 204 (71).

Hamilton, H. J., **41,** 761 (486); **44,** 9 (**43,** 773), 469 (337), 469 (338); **45,** 195 (**44,** 776); **47,** 173 (36).

Hamilton, O. H., **42,** 160 (29), 161 (22), 776 (626); **43,** 755 (467); **44,** 469 (338), 753 (492); **46,** 6 (30); **47,** 522 (396).

Hammer, P. C., **47,** 522 (396).

Hamming, R. W., **49,** 518 (363).

Hancock, H., **42,** 148 (40).

Handelman, G. H., **49,** 832 (860).

Harding, J. F., **49,** 519 (369).

Hardy, G. H., **42,** 764, 764.

Harkin, D. C., **44,** 163 (33), 751 (628); **46,** 864 (883).

Harper, F. S., **41,** 149 (**40,** 806).

Harrell, E. G., **42,** 458 (323).

Harrington, W. J., **47,** 528 (383).

Harrison, G., **49,** 343 (38).

Harrison, R. A., **43,** 4 (**42,** 807).

Harrold, O. G., **43,** 441 (201), 442 (206); **45,** 196 (**44,** 776), 196 (**44,** 776), 207 (72), 498 (362), 807 (668); **46,** 196 (43), 199 (44), 200 (43), 579 (418), 581 (418), 865 (883), 867 (609); **47,** 185 (53), 841 (712); **48,** 807 (835); **49,** 344 (221).

Hartley, M. C., **41,** 158 (**40,** 802).

Hartman, P., **44,** 5 (**43,** 777), 308 (189); **45,** 340 (229), 490 (362), 807 (668).

Hausmann, B. A., **43,** 313 (174).

Haviland, E. K., **42,** 158 (38), 293 (180).

Hay, G. E., **47,** 520 (390); **49,** 830 (693).

Hedge, L. B., **45,** 205 (88); **46,** 716 (610); **47,** 183 (37).

Hedlund, G. A., **41,** 455 (334); **42,** 774 (626), 774 (627); **44,** 467 (345); **45,** 47, 206 (79); **46,** 371 (228), 372 (228); **47,** 843 (707).

Hedrick, E. R., **41,** 145 (**40,** 812).

Heins, A. E., **41,** 160 (30); **45,** 207 (72), 494 (363); **46,** 198 (30), 570 (418); **47,** 186 (37), 520 (390); **48,** 192 (45); **49,** 200 (52).

Heins, M. H., **45,** 207 (**44,** 787), 496 (363); **46,** 197 (44), 581 (401), 865 (884); **47,** 528 (556); **49,** 833 (854); **50,** 31 (**49,** 854).

Hellinger, E. D., **46,** 201 (221); **48,** 502 (362).

Helmer, O., **43,** 151 (38), 447 (189); **44,** 163 (33), 459 (338); **45,** 494 (363), 807 (668); **46,** 579 (419); **49,** 343 (38).

Helsel, R. G., **49,** 518 (364).

Henderson, A., **44,** 754 (492).

Hendrickson, M. S., **46,** 199 (44).

Henle, P., **42,** 770 (641); **44,** 163 (34).

Herriot, J. G., **46,** 865 (756); **50,** 476 (340).

Herschfeld, A., **42,** 2 (**41,** 631).

Herzberger, M., **42,** 772 (492); **43,** 445 (198); **44,** 307 (189); **49,** 27 (52); **50,** 319 (186).

Herzog, F., **41,** 2 (**40,** 793); **46,** 370 (228); **47,** 841 (686); **49,** 831 (852); **50,** 474 (337).

Hestenes, A. D., **46,** 199 (45), 201 (44), 201 (45).

Hestenes, M. R., **41,** 160 (**40,** 802), 454 (200), 454 (193), 454 (203); **42,** 454 (329); **43,** 8 (**42,** 821), 442 (205); **44,** 460 (338); **45,** 207 (72), 207 (72), 494 (519), 496 (363); **46,** 199 (45); **47,** 187 (37), 519; **49,** 519 (536), 833 (855).

Heyda, J. F., **47,** 520 (384).

Hicks, H. C., **41,** 156 (19).

Higdon, A., **42,** 459 (342).

Highberg, I. E., **41,** 145 (**40,** 813), 146 (**40,**

813), 314 (196), 314 (197), 762 (624); **42,** 145 (**41,** 799), 146 (**41,** 802), 146 (**41,** 802), 460 (315), 461 (317), 602 (486), 776 (630).
Hildebrand, F. B., **46,** 579 (229); **47,** 187 (45); **48,** 194 (45); **49,** 833 (693).
Hildebrandt, T. H., **47,** 834; **48,** 177.
Hill, J. D., **41,** 455 (334); **50,** 475 (340), 475 (340).
Hille, E., **41,** 456 (346); **42,** 294 (184), 452 (340), 774 (488); **43,** 9 (**42,** 824), 308, 314 (174); **44,** 308 (198), 308 (198), 468 (339); **45,** 341 (88), 489 (364); **46,** 3 (30), 370 (229), 864 (892), 867 (749); **47,** 4 (37), 530 (557); **48,** 9 (38), 495 (519), 806 (828); **49,** 194 (44), 344 (364); **50,** 30 (56), 804, 810 (668).
Hillman, A., **48,** 337 (213), 494 (363); **49,** 27 (**48,** 828), 200 (58).
Hinrichsen, J. J. L., **48,** 7 (45).
Hoel, P. G., **43,** 448 (329); **44,** 462 (339); **45,** 490 (364); **46,** 7 (30); **49,** 194 (59).
Hohn, F. E., **47,** 839 (706).
Holl, D. L., **42,** 459 (342); **43,** 7 (**42,** 817); **48,** 6 (46).
Hollcroft, T. R., **41,** 157 (22), 760 (627); **42,** 453 (329), 773 (498), 776 (805); **43,** 154 (26), 305; **44,** 163 (34), 468 (339), 751 (628); **45,** 48 (**44,** 773), 207 (72), 806 (668); **47,** 839 (707); **49,** 514 (371).
Holmboe, J., **49,** 194.
Holtom, C., **49,** 833 (860).
Hopf, E., **41,** 763 (788); **42,** 289.
Hopkins, C., **42,** 453 (330), 775 (627); **43,** 152 (26); **44,** 469 (198), 751 (628); **45,** 205 (73), 341 (229).
Horenstein, W., **48,** 5 (**47,** 861), 337 (213).
Hostetter, I. M., **42,** 461 (317), 602 (347), 603 (347).
Hotelling, H., **41,** 3 (**40,** 797), 759 (632); **42,** 3 (**41,** 783), 450, 601; **44,** 165 (34), 751 (629); **46,** 865 (756).
Householder, A. S., **43,** 6 (**42,** 818); **47,** 520 (391), 842 (703).
Hsiung, C. C., **49,** 833 (696), 833 (696), 833 (696); **50,** 319 (189), 810 (675), 810 (676), (676).
Hsu, C. T., **47,** 530 (396).
Hsu, P. L., **50,** 808 (678).
Hua, L. K., **46,** 581 (419), 581 (419), 867 (893), 867 (893); **50,** (822), (822).
Huff, G. B., **50,** 475 (190).
Hughes, H. K., **48,** 502 (364); **49,** 200 (45), 518 (364); **50,** 474 (341).
Hull, R., **41,** 458 (199); **42,** 161 (22), 457 (320); **43,** 446 (191); **44,** 460 (339); **46,** 715 (610); **50,** 31 (54).
Humphreys, M. G., **41,** 148 (**40,** 793).
Huntington, E. V., **41,** 455 (334), 455 (335), 456 (339); **42,** 770 (492); **44,** 164 (51), 751 (492); **45,** 490 (364); **46,** 372 (401).
Hurd, C. C., **43,** 151 (26), 447 (189).
Hurewicz, W., **47,** 529 (562); **48,** 493 (519).
Hurwitz, H., **46,** 372 (221), 581 (420).
Huskey, H. D., **49,** 518 (364), 831 (699).
Hutchings, W. L., **43,** 753 (617).
Hutchinson, L. C., **46,** 866 (884); **48,** 493 (372); **49,** 830 (860).
Hutchinson, L. P., **43,** 155 (27).
Hyers, D. H., **41,** 762 (624); **42,** 146 (**41,** 800), 775 (631); **43,** 8 (**42,** 822), 9 (**42,** 825), 9 (**42,** 826), 442 (203), 755 (618); **44,** 750 (629); **45,** 196 (**44,** 777), 805 (669); **47,** 520 (206), 845 (708); **48,** 502 (368); **49,** 521 (365); **50,** 476.

Ingersoll, B. M., **50,** 318 (180), 808 (669), (824).
Ingraham, M. H., **41,** 760 (622); **42,** 772 (493); **43,** 446 (187), 446 (187), 752 (618); **44,** 460 (340); **45,** 492, 495 (364).
Ingram, W. H., **41,** 159 (**40,** 666), 309 (40); **42,** 161 (24), 292 (40), 603 (485); **43,** 755 (332); **44,** 6 (**43,** 468), 307 (**43,** 780); **46,** 573 (420), 867 (893); **50,** 810 (669).
Isaacs, R. P., **45,** 340 (89); **49,** 27 (**48,** 832); **50,** 319 (186).
Iyer, V. G., **43,** 755 (467).

Jackson, D., **41,** 759 (630), 763 (632); **42,** 159 (26), 458 (321), 773 (627); **43,** 154 (27), 155 (27), 155 (27), 447 (188), 752 (336); **44,** 8 (**43,** 772), 750 (629); **45,** 206 (73), 494 (364), 806 (669); **46,** 199 (45); **47,** 521 (384); **50,** 319 (341).
Jackson, S. B., **43,** 312 (331); **44,** 458 (340); **50,** 472 (347).
Jacobson, N., **41,** 310 (40), 311 (40), 453 (328); **43,** 152 (39), 157 (38), 312 (174), 448 (186), 448 (186), 753 (618); **44,** 468 (340), 469 (340); **45,** 206 (89), 341 (230),

489 (235); **46,** 4 (45, 835), 867 (884); **47,** 834; **48,** 169, 493 (518); **49,** 340, 833 (849); **50,** 810 (665), (822).
Jaeger, J. C., **44,** 753 (493).
James, G., **43,** 8 (42, 822), 442 (206); **44,** 9 (43, 774), 462 (341); **49,** 194 (45).
James, H. M., **47,** 524.
James, R. C., **48,** 8 (53), 9 (53), 495 (375); **49,** 521 (373); **50,** 161 (57), 476 (349).
James, R. D., **41,** 145 (40, 811), 314 (197); **42,** 145 (41, 799), 159 (27), 460 (315), 602 (485); **43,** 9 (42, 824), 442 (204); **44,** 461 (341); **45,** 196 (44, 776); **46,** 197 (45); **47,** 841 (691); **48,** 502 (358); **50,** 477 (334).
Jeffery, R. L., **41,** 159 (34), 455 (335); **42,** 159 (36), 458 (322); **46,** 867 (885); **47,** 834; **48,** 178; **50,** (669).
Jenkins, E. D., **41,** 458 (340).
Jenks, F. P., **46,** 571 (420).
Jennings, S. A., **46,** 3 (45, 835), 370 (229); **47,** 844 (686); **50,** 477 (334).
Jennings, W., **46,** 198 (46).
Jensen, V. P., **43,** 7 (42, 817).
Jessen, B., **41,** 454 (201).
John, F., **42,** 148 (41, 794), 149 (41, 794), 458 (324); **43,** 155 (28), 447 (328), 448 (328), 754 (619); **44,** 459 (341); **45,** 204 (73), 807 (669); **46,** 570 (420), 866 (756); **47,** 185 (38); **48,** 501 (362); **49,** 344 (53).
Johnson, M. M., **45,** 495 (365).
Johnson, R. E., **48,** 502 (358); **50,** 31 (49, 850).
Jonah, H. F. S., **41,** 458 (347); **48,** 502 (358); **49,** 193 (45).
Jones, A. W., **47,** 843 (553); **50,** 318 (179).
Jones, B. W., **42,** 771 (627); **44,** 469 (341); **45,** 205 (73); **46,** 197 (46); **47,** 843 (686); **48,** 4 (32); **50,** 809 (665).
Jones, C. D., **43,** 445 (190).
Jones, F. B., **41,** 311 (41); **42,** 603 (484), 603 (484); **43,** 314 (174); **44,** 460 (199); **45,** 206 (44, 788), 207 (44, 787); **46,** 199 (46), 200 (46), 867 (885); **47,** 6 (53), 185 (53), 341 (217), 840 (697); **48,** 194 (220), 806 (836).
Jones, H. E., **44,** 164 (31).
Jones, R. C., **49,** 24.
Jordan, J. Q., **42,** 770 (493).

Kac, M., **45,** 340 (230), 342 (365); **46,** 196 (46), 199 (30), 371 (223), 866 (757); **47,** 529 (554), 842 (692), 844 (697); **48,** 192 (38), 807 (667), 807 (673); **50,** 319 (181).
Kagno, I. N., **41,** 453 (331), 762 (349); **42,** 452 (330); **44,** 469 (341); **46,** 371 (230).
Kakutani, S., **47,** 340 (218), 842 (697), 845 (697).
Kales, M. L., **44,** 459 (342); **48,** 503 (363).
Kalisch, G. K., **47,** 842 (686); **50,** 474 (334).
Kamke, E., **44,** 752 (629).
van Kampen, E. R., **42,** 454 (330); **44,** 469 (342); **45,** 342 (365); **46,** 200 (47).
Kanarik, R., **41,** 157 (40, 803).
Kaplan, N., **42,** 453 (184).
Kaplan, S., **48,** 503 (375).
Kaplan, W., **45,** 806 (669); **46,** 578 (421); **47,** 842 (704); **49,** 517 (369); **50,** 474 (344).
Kaplansky, I., **47,** 340 (31); **48,** 194 (32), 337 (220); **49,** 27 (48, 826), 27 (48, 826), 833 (535).
Karlin, M., **48,** 493 (363).
von Kármán, T., **46,** 188; **47,** 174 (45); **48,** 495; **50,** 161.
Karush, W., **48,** 501 (519).
Kasner, E., **41,** 158 (25), 311 (188), 311 (190), 311 (190), 453 (329), 455 (335); **42,** 2 (41, 784), 3 (41, 784), 292 (181), 453 (330); **43,** 3 (42, 807), 155 (28), 156 (28), 755 (471), 755 (472); **44,** 165 (35), 165 (35), 308 (190), 753 (355), 754 (355); **45,** 48 (44, 640), 340 (230), 491 (365), 810 (669); **46,** 4 (45, 830), 371 (47), 372 (47), 581 (421), 867 (749); **47,** 187 (214), 340 (213), 341 (212), 341 (213), 522 (213), 843 (393), 843 (560), 843 (560), 843 (707); **48,** 336 (218), 337 (219), 806 (672), 807 (672); **49,** 26 (48, 833), 27 (48, 671), 27 (48, 672), 27 (55), 200 (53), 200 (55), 343 (220), 514 (371), 514 (371), 831 (697); **50,** 21 (49, 697), 31 (49, 864), 318 (190), 319 (190), 472 (500), 810 (676).
Kattsoff, L. O., **42,** 770 (641).
Kawaguchi, A., **44,** 165 (43, 769).
Kazarinoff, D. K., **45,** 194 (44, 782).
Keller, E. G., **49,** 520.
Kelley, J. L., **44,** 467 (190); **45,** 206 (44, 788), 207 (74), 489 (365), 808 (667); **46,** 198 (47), 579 (421); **47,** 184 (218); **48,** 192 (221).

Kelly, P. J., 50, (828).
Kempner, A. J., 41, 147, 758 (630), 760 (631), 763 (630); 45, 206 (74); 48, 807 (826).
Kennedy, E. S., 46, 4 (45, 835).
Kenney, J. F., 45, 194 (44, 782).
Kershner, R. B., 42, 162 (38), 292 (181); 44, 8 (43, 773), 308 (189), 458 (342); 45, 495 (366), 807 (668); 47, 842 (698); 48, 192 (38).
Ketchum, G. S., 41, 460 (344); 43, 752 (619).
Ketchum, P. W., 41, 460 (345); 42, 458 (185), 771 (628); 43, 152 (29), 752 (619).
Kimball, W. S., 42, 458 (319); 43, 6 (42, 818), 447 (194); 45, 808 (670).
Kincaid, W. M., 48, 807 (675).
Kiokemeister, F., 47, 522 (374).
Kleene, S. C., 41, 158 (24), 761 (489), 761 (490), 761 (627); 42, 159 (42), 770 (639); 43, 155 (41), 445 (188); 46, 866 (885); 48, 193 (51), 493 (373).
Kline, J. R., 46, 189.
Knebelman, M. S., 42, 776 (625); 43, 753 (619); 44, 468 (342); 45, 809 (670).
Knipp, J. C., 41, 157 (23).
Knobelauch, E. A., 47, 844 (713).
Kober, H., 47, 341 (384); 49, 515 (537); 50, 472 (341).
Koehler, F., 44, 8 (43, 772); 45, 494 (366).
Kogbetliantz, E. G., 41, 456 (347); 49, 27 (48, 829), 830 (693).
Kolchin, E. R., 44, 754 (488); 45, 340 (230), 808 (521); 46, 370 (230); 47, 340 (202).
Komm, H., 47, 840 (713).
Koopman, B. O., 41, 455 (336); 45, 341 (89); 46, 369, 581 (421).
Korgen, R. L., 42, 770 (639).
Korn, A., 48, 4 (47, 863); 49, 342 (53), 830 (861).
Korzybski, A., 42, 160 (39); 45, 205 (74); 46, 196 (45, 836).
Kossack, C. F., 45, 496 (366).
Krabill, D. M., 48, 807 (829).
Krall, H. L., 41, 160 (30); 42, 455 (331), 455 (331); 44, 468 (199); 46, 578 (422).
Kraus, C. A., 44, 154.
Kraus, G. R., 43, 753 (466).
Kullback, S., 41, 149 (40, 801), 149 (40, 806), 312 (41), 312 (190), 455 (192), 455 (200); 42, 149 (41, 792), 160 (41, 790).
Kuratowski, C., 42, 450.

Laden, H. N., 47, 339 (206); 48, 194 (38).
Laderman, J., 46, 4 (45, 660), 581 (604).
Ladue, M. E., 49, 343 (55).
Lambert, W. D., 46, 189.
Lamoreau, F. L., 45, 205 (44, 641).
Lamson, K. W., 45, 49 (44, 641).
Lancaster, O. E., 44, 164 (43, 778), 165 (35), 469 (199); 45, 204 (75).
Lanczos, C., 41, 309 (183); 42, 160 (30), 457 (325); 45, 194 (44, 783).
Lane, E. P., 41, 459 (43), 460 (44), 759 (484); 43, 447 (42, 804); 46, 6 (31).
Lane, R. E., 47, 522 (385); 49, 518 (365); 50, 810 (824).
Langer, R. E., 42, 452 (331); 43, 447 (193), 752 (620); 44, 460 (356); 45, 806 (670); 46, 866 (885); 47, 840 (698).
Langford, C. H., 44, 163 (36).
LaPaz, L., 47, 522 (385).
Laporte, O., 41, 156 (19), 459 (342); 42, 771 (628).
Larguier, E. H., 42, 161 (24); 43, 306 (167); 45, 207 (75), 341 (89).
LaSalle, J. P., 46, 8 (31), 568 (422); 47, 174 (38), 174 (38), 183 (53), 843 (713).
Lasley, J. W., 42, 3 (41, 636); 43, 153 (21); 44, 754 (492).
Latimer, C. G., 41, 458 (192), 760 (483), 763 (626); 42, 147, 159 (41, 790), 457 (319); 43, 153 (42, 813), 447 (191); 44, 457; 45, 493 (366); 807 (671); 46, 197 (48).
Latshaw, V. V., 43, 156 (29); 44, 6 (43, 767).
Lay, Y., 45, 493 (367).
Lee, H. L., 49, 831 (687).
Lefschetz, S., 43, 146, 315; 47, 834.
Lehmer, D. H., 41, 310 (186); 42, 292 (181), 293 (182), 602 (346), 603 (346); 43, 306 (167), 313 (175), 751 (472); 44, 306 (190), 754 (630); 45, 342 (235), 807 (671); 46, 189; 47, 174 (51), 517 (380); 48, 8 (47, 857), 807 (665); 49, 520 (362).
Lehmer, D. N., 41, 146 (18).
Lehner, J., 47, 341 (217), 528 (554); 48, 194 (35), 493 (358).
Leibler, R. A., 46, 570 (414), 865 (755).
Leighton, W., 42, 294 (184), 454 (185), 770

(493), 770 (628), 774 (629); **44**, 750 (488), 750 (630); **45**, 208 (**44**, 788), 809 (660); **47**, 186 (39), 839 (557), 839 (692), 842 (696); **48**, 496 (213), 503 (213), 807 (520); **49**, 832 (536).
Lengyel, B. A., **44**, 750 (489); **49**, 343 (39).
Lester, C. A., **44**, 5 (**43**, 628).
Levenberg, K., **50**, 30 (**49**, 861).
Levi, H., **44**, 306 (191), 753 (630); **47**, 340 (202); **48**, 5 (**47**, 857).
Levi-Civita, T., **42**, 764, 764.
Levinson, A., **48**, 5 (**47**, 704).
Levinson, N., **43**, 755 (334); **45**, 208 (**44**, 788), 208 (**44**, 789), 491 (236); **46**, 196 (48); **48**, 335; **50**, 21 (**49**, 855).
Levit, R. J., **48**, 8 (**47**, 857).
Levitzki, J., **44**, 165 (36); **45**, 810 (671); **49**, 28 (39), 200 (38); **50**, 319 (54), (823).
Lewis, A. L., **50**, 30 (58).
Lewis, D. C., **41**, 453 (330); **43**, 754 (620), 755 (620); **45**, 809 (671).
Lewis, F. A., **42**, 602 (345); **46**, 200 (48); **48**, 493 (359).
Lewis, P. E., **46**, 572 (422).
Lewy, H., **41**, 310 (185); **43**, 8 (**42**, 821), 8 (**42**, 824), 8 (**42**, 824); **44**, 462 (342); **47**, 518 (385).
Lieber, P., **50**, 161.
Lin, C. C., **50**, 476.
Ling, D. P., **46**, 371 (230).
Litzinger, M., **41**, 312 (191).
Lonseth, A. T., **45**, 497 (367); **47**, 520 (385); **50**, 30 (58), 320 (181).
Loomis, L. H., **47**, 4 (**46**, 893), 530 (386), 530 (386); **49**, 514 (365); **50**, 471 (342).
Lorch, E. R., **41**, 455 (336), 759 (628); **44**, 306 (51), 752 (486); **45**, 809 (519); **46**, 199 (**45**, 830); **47**, 4 (**46**, 604), 528 (386); **48**, 336 (**47**, 860); **49**, 515 (537); **50**, 464.
Lorch, L., **48**, 807 (829).
Lowan, A. N., **43**, 3 (**42**, 643), 156 (29); **44**, 6 (**43**, 767), 308 (191); **45**, 49 (**44**, 641), 49 (**44**, 641), 49 (**44**, 774), 49 (**44**, 774), 491 (367); **46**, 4 (**45**, 660), 4 (**45**, 660), 372 (48), 372 (221), 581 (604), 581 (605); **48**, 5 (**47**, 704), 5 (**47**, 861), 337 (213), 337 (213), 494 (363); **49**, 27 (**48**, 520), 515 (539); **50**, 22 (**49**, 694), 472 (342), 810 (499).
Lowenstein, L. L., **43**, 752 (621).
Lubben, R. G., **43**, 154 (41), 753 (621); **44**, 162 (36), 753 (630); **45**, 206 (75); **46**, 199 (49); **47**, 840 (714); **48**, 807 (675).
Luther, H. A., **43**, 446 (195).

McClay, D. T., **46**, 580 (422); **47**, 528 (560).
McCoy, D., **41**, 159 (28).
McCoy, N. H., **41**, 160 (40, 803); **42**, 2 (**41**, 635); **43**, 7 (**42**, 819), 311 (177), 755 (467); **44**, 165 (37), 306 (191), 754 (492); **45**, 808 (672); **47**, 834; **48**, 169.
McDaniel, R. R., **44**, 469 (343).
McDaniel, W. C., **45**, 494 (368).
McEwen, G. F., **47**, 173 (49); **48**, 9 (52).
McEwen, W. H., **42**, 771 (630); **43**, 755 (622); **44**, 165 (37), 754 (631); **45**, 208 (76); **46**, 868 (757).
McFarlan, L. H., **42**, 602 (484).
McKinsey, J. C. C., **42**, 460 (314).
McMillan, B., **45**, 340 (234); **47**, 845 (861); **49**, 193 (54), 833 (855).
McShane, E. J., **42**, 776 (630); **43**, 153 (39), 156 (39), 448 (328); **44**, 162 (52), 468 (343); **45**, 5, 205 (76), 208 (76), 208 (76), 489 (369), 491 (369), 806 (673), 810 (672), 810 (673), 810 (673), 810 (673); **46**, 580 (401), 581 (423); **47**, 528 (557); **48**, 194 (39), 194 (39); **49**, 824.
MacColl, L. A., **45**, 48 (**44**, 642); **50**, 21 (**49**, 865).
MacDonald, J., **50**, 29 (63).
MacDonald, J. K. L., **43**, 751 (621); **44**, 750 (631), 754 (631); **46**, 372 (230).
MacDuffee, C. C., **41**, 459 (343); **42**, 149 (**41**, 793), 457 (324); **45**, 193; **47**, 529 (374); **48**, 191 (32); **50**, 804.
MacGregor, C. W., **41**, 456 (338).
MacKay, R., **44**, 753 (631).
Mackey, G. W., **48**, 8 (**47**, 861); **50**, 472 (342).
MacLane, S., **41**, 157 (21), 454 (337); **42**, 159 (**41**, 789), 161 (**41**, 789), 451 (332), 454 (331), 771 (629); **43**, 153 (19), 153 (29), 313 (175); **44**, 164 (37), 460 (199), 460 (343), 754 (632); **45**, 194 (**44**, 783), 205 (77), 208 (77), 340 (231), 491 (367); **46**, 3 (**45**, 662), 3 (**45**, 831), 372 (231), 372 (232), 580 (423); **47**, 176, 341 (201), 530 (375), 530 (375), 530 (375), 841 (866); **48**, 192 (32), 193 (54), 805 (836); **49**, 343 (39), 518 (61); **50**, 30 (53).

MacNeille, H. M., **41,** 453 (193); **42,** 772 (499), 775 (629); **43,** 311 (175); **44,** 162 (38); **45,** 205 (77).
MacNeish, H. F., **46,** 200 (49), 200 (49).
MacQueen, M. L., **43,** 447 (**42,** 804).
Maddaus, I., **43,** 754 (472); **45,** 808 (672).
Madow, W. G., **43,** 312 (176), 314 (176); **46,** 868 (886); **47,** 340 (216).
Maharam, D. See Stone, D. M.
Maier, W., **41,** 459 (347).
Maker, P. T., **44,** 468 (200); **45,** 491 (368); **47,** 4 (**46,** 894); **48,** 191 (39).
Malkin, I., **45,** 810 (672).
Mancill, J. D., **42,** 162 (26); **43,** 151 (30); **44,** 460 (200); **45,** 49 (**44,** 774); **46,** 199 (49), 200 (50); **47,** 843 (558), 844 (698).
Mandelbrojt, S., **47,** 184 (207), 842 (699); **48,** 807 (520); **49,** 27 (**48,** 829), 833 (689); **50,** 320 (181).
Manel, B., **46,** 868 (610).
Mann, H. B., **48,** 336 (211), 805 (674); **49,** 27 (**48,** 834), 831 (865).
Manning, D. See Smiley, D. M.
Manning, R., **46,** 7 (31).
Manning, W. A., **45,** 205 (78); **48,** 495.
Mansfield, R., **47,** 843 (699).
March, H. W., **45,** 494 (368).
Marcinkiewicz, J., **47,** 185 (39).
Marden, M., **42,** 159 (41), 458 (341), 458 (187), 771 (629); **47,** 840 (687); **49,** 833 (694); **50,** 31 (58), 474 (345).
Maria, A. J., **41,** 161 (37), 161 (37); **43,** 154 (30), 752 (621); **46,** 3 (**45,** 835).
Marth, E., **48,** 807 (667).
Martin, A. V., **45,** 208 (78); **46,** 371 (222).
Martin, M. H., **45,** 205 (78); **46,** 579 (605).
Martin, M. P., **46,** 581 (423).
Martin, R. S., **43,** 448 (200); **47,** 4 (39).
Martin, W. T., **41,** 309 (183), 760 (622); **42,** 162 (35), 292 (176), 452 (332), 459 (187); **43,** 152 (21); **44,** 307 (191); **45,** 489 (358), 807 (663); **46,** 3 (**45,** 836), 199 (31), 372 (225); **48,** 191 (37); **49,** 27 (**48,** 666), 343 (218), 831 (688); **50,** 21, 471 (339), 808 (667), 809 (668).
May, A. E., **42,** 457 (321).
Mayer, W., **41,** 455 (204); **42,** 774 (493); **43,** 753 (619); **46,** 867 (751).
Meder, A. E., **50,** (827).
Mehlenbacher, L. E., **42,** 458 (324); **45,** 806 (522).
Mendel, C. W., **41,** 458 (340); **42,** 158 (25); **48,** 192 (30); **50,** 31 (56).
Menger, K., **43,** 312 (332); **44,** 163 (38), 165 (39); **45,** 48 (**44,** 785); **46,** 197 (50), 571 (402), 573 (423); **48,** 807 (833), 807 (833); **49,** 193 (56), 193 (61).
Merrill, L. L., **49,** 832 (861).
Merriman, G. M., **42,** 770 (488); **43,** 157 (**42,** 815); **44,** 754 (632).
Mersman, W. A., **41,** 145 (**40,** 813), 146 (**40,** 813); **42,** 146 (**41,** 799), 460 (315), 461 (318); **47,** 517 (391); **48,** 495 (371), 496 (371).
Mewborn, A. B., **45,** 497 (369), 498 (520); **46,** 7 (31), 568 (423).
Meyer, H., **47,** 840 (699).
von Mezynski, I., **50,** 810 (676).
Michal, A. D., **41,** 146 (**40,** 814), 146 (**40,** 814), 146 (**40,** 814), 146 (**40,** 814), 313 (195), 314 (196), 759 (622), 762 (624), 762 (624); **42,** 146 (**41,** 800), 146 (**41,** 800), 146 (**41,** 800), 146 (**41,** 803), 460 (315), 461 (317), 461 (318), 461 (319), 773 (630), 775 (631), 776 (630); **43,** 8 (**42,** 822), 9 (**42,** 825), 443 (204), 755 (622), 755 (622); **44,** 10 (**43,** 775), 10 (**43,** 777), 461, 462 (343), 462 (344), 462 (344); **45,** 196 (**44,** 777), 196 (**44,** 777), 497 (369), 498 (520), 811 (674), 811 (674), 811 (674); **46,** 8 (32), 568 (424), 580 (424); **48,** 496 (372); **49,** 833 (862), 833 (862); **50,** 477 (345).
Mickle, E. J., **48,** 191 (39).
Milgram, A. N., **42,** 453 (332); **43,** 154 (165), 313 (332); **44,** 162 (38), 165 (39); **45,** 495 (520); **46,** 198 (50), 571 (424), 573 (424); **47,** 6 (54), 184 (54); **48,** 503 (375); **49,** 193 (61).
Miller, D. D., **46,** 571 (402).
Miller, D. S., **49,** 832 (853), 833 (689); **50,** 811 (670), (669).
Miller, E. W., **41,** 459 (346), 460 (345); **42,** 454 (333); **43,** 445 (197), 448 (197); **44,** 460 (344); **45,** 811 (829); **46,** 197 (41), 571 (415); **47,** 6 (52).
Miller, G. T., **48,** 502 (364).
Miller, H. C., **45,** 341 (231), 498 (369), 498 (370); **46,** 372 (50); **47,** 185 (54), 186 (55), 187 (55), 522 (398); **48,** 192 (54).
Miller, L. H., **49,** 519 (217).
Millsaps, K., **48,** 9 (54), 496 (359); **49,** 194

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Milne, W. E., 44, 162 (39).
Min, S. H., 50, (822).
Miser, H. J., 46, 572 (605).
Mises, R. v., 48, 492; 50, 320 (187).
Mitchell, J. M., 48, 807 (667).
Mitchell, W. L., 46, 571 (425).
Mittleman, D., 47, 341 (214); 48, 337 (219), 337 (372).
Montgomery, D., 41, 158 (26), 759 (487); 42, 159 (31), 603 (348), 603 (348); 43, 305 (167), 311 (177); 44, 5 (43, 767), 165 (37), 753 (489); 45, 808 (674), 810 (674); 46, 3 (45, 830), 4 (45, 836), 201 (50); 47, 844 (687); 48, 806 (676), 807 (676), 808 (676); 49, 339.
Mood, A. M., 47, 839 (710).
Moon, P., 49, 25.
Moore, C. N., 41, 3 (40, 797), 151, 161 (33), 310 (188), 454 (331, 491); 42, 148 (41, 792), 159 (31), 773 (631); 43, 156 (30); 44, 467 (344); 45, 206 (79); 47, 185 (39); 49, 514 (45); 50, 808 (670).
Moore, M. G., 44, 162 (40), 165 (39), 459 (345); 45, 494 (370); 47, 845 (699).
Moore, R. L., 42, 162 (35); 43, 153 (31), 156 (30); 45, 199; 46, 200 (51), 200 (51), 571 (425); 47, 841 (866); 48, 808 (836), 808 (836); 50, 32 (64).
Moritz, R. E., 42, 603 (346).
Morkovin, V., 48, 806 (670).
Morrey, C. B., 41, 145 (40, 812); 42, 461 (316); 44, 307 (192), 468 (345); 45, 497 (370), 810 (675); 46, 7.
Morse, A. P., 42, 454 (327); 43, 3 (42, 808), 153 (19), 753 (622), 754 (335); 44, 165 (40), 755 (486); 46, 7 (27); 48, 805 (666); 50, 22 (49, 856), 22 (49, 856).
Morse, M., 41, 161 (32); 42, 158 (40), 454 (185), 454 (341); 43, 156 (31); 44, 467 (345), 750 (632); 45, 206 (79), 489 (370); 46, 197 (222); 47, 843 (707); 48, 501 (364), 808 (521); 50, 24.
Moskovitz, D., 44, 752 (633); 45, 805 (675); 50, 319 (187).
Moursund, A. F., 41, 4 (40, 667), 146 (40, 811), 314 (195), 761 (490); 46, 715 (610).
Muhly, H. T., 45, 489 (371), 807 (675); 49, 833 (539).
Munro, G. C., 48, 7 (39).
Munroe, M. E., 48, 804 (521).
Murdoch, D. C., 44, 468 (345); 45, 340 (231); 46, 3 (45, 837), 579 (425); 47, 840 (687).
Murnaghan, F. D., 42, 772 (632), 776 (632); 44, 469 (200), 469 (200); 49, 824.
Murray, F. J., 41, 309 (183); 42, 774 (632); 43, 4 (42, 808); 44, 308 (52); 46, 199 (32); 47, 523; 50, 22 (49, 856).
Musselman, J. R., 45, 194 (44, 783).
Myers, S. B., 41, 159 (29), 453 (329); 42, 161 (37); 43, 445 (197); 44, 163 (40); 47, 184 (49), 187 (55); 48, 194 (39); 50, 811 (681).
Myers, W. H., 46, 6 (32).

Nakayama, T., 44, 5 (43, 768), 306 (192), 468 (346), 751 (633); 45, 340 (231).
Neelley, J. H., 43, 753 (466).
Neikirk, L. I., 42, 602 (485).
Nelson, L., 46, 568 (425).
Nesbitt, C. J., 44, 5 (43, 766), 165 (40), 468 (346); 45, 194 (44, 783); 48, 193 (24); 49, 193 (39).
Netzorg, D. L., 41, 309 (184); 43, 754 (623), 755 (623), 756 (623); 44, 468 (346).
Neuhaus, A. See Newhouse, A.
von Neumann, J., 41, 151 (305), 160 (35), 160 (35); 42, 452 (343), 771 (632); 43, 4 (42, 808), 153 (37), 746; 45, 205 (79); 46, 715; 47, 834, 842 (696); 48, 169.
Newell, H. E., 46, 868 (757); 49, 833 (856); 50, 320 (181).
Newhouse, A., 45, 808 (675); 50, 475 (335).
Newman, P., 43, 756 (472); 46, 581 (425).
Neyman, J., 46, 865 (886); 47, 174 (50).
Nichols, G. D., 41, 148 (40, 806); 42, 459 (189); 47, 186 (39).
Nicholson, E. H., 47, 845 (700).
Nielsen, K. L., 46, 571 (426); 47, 528 (386); 48, 336 (214), 808 (668); 50, 30 (59).
Nilson, E. N., 47, 183 (43); 50, 811 (670).
Niven, I. M., 42, 602 (486); 44, 459 (346); 45, 490 (371); 46, 200 (51); 47, 521 (375), 529 (375), 845 (687), 845 (691); 48, 502 (359); 49, 193 (39), 193 (40); 50, 31 (54).
Noether, E., 41, 2.
Norris, N., 42, 160 (25).
Northrop, E. P., 42, 161 (24).
Nowlan, F. S., 42, 602 (486).

Oakley, C. O., **42,** 160 (29); **45,** 204 (80).
Oberg, E. N., **44,** 755 (633); **45,** 806 (676); **47,** 843 (558).
Oboukhoff, N. M., **47,** 187 (207); **48,** 194 (40).
O'Connor, R. E., **44,** 6 (**43,** 628), 752 (633); **45,** 495 (236); **48,** 5 (**47,** 858), 5 (**47,** 859), 5 (**47,** 859); **49,** 831 (850).
Odle, J. W., **47,** 6 (55).
Odoms, A., **42,** 160 (31).
Offord, A. C., **41,** 309 (184).
Oldenburger, R., **41,** 160 (31), 458 (202); **42,** 159 (36), 457 (490), 459 (188), 459 (189); **43,** 152 (31), 312 (177), 446 (193); **44,** 5 (**43,** 768), 165 (41), 470 (346), 751 (634); **45,** 194 (**44,** 784), 208 (80), 489 (371), 808 (676); **46,** 3 (**45,** 837), 198 (51), 572 (402), 572 (402), 572 (403), 581 (426), 868 (757); **47,** 184 (31), 840 (688); **48,** 493 (360), 494 (359), 502 (359); **49,** 519 (40).
Olds, C. D., **43,** 442 (206); **46,** 567 (426); **47,** 522 (381), 522 (387).
Olds, E. G., **41,** 159 (**40,** 803); **43,** 152 (32), 754 (623); **44,** 164 (**43,** 779).
Ollmann, L. F., **45,** 495 (236), 807 (676).
Olmsted, J. M. H., **46,** 865 (757).
Olshen, A. C., **43,** 445 (194).
Opatowski, I., **45,** 806 (676); **46,** 864 (887); **47,** 842 (704); **48,** 7 (46), 502 (364, 950); **49,** 518 (370), 519 (369), 834 (862); **50,** 29 (62), 320 (187).
Ore, O., **41,** 3 (**40,** 797); **42,** 452 (333), 775 (489); **43,** 153 (32), 311 (177), 313 (174); **44,** 306 (188), 464; **45,** 208 (80), 340 (231), 340 (232), 809 (520); **46,** 580 (427), 581 (427); **47,** 340 (202), 341 (202), 834; **48,** 169; **50,** 320 (179).
Ott, E. R., **47,** 184 (**46,** 894).
Overholtzer, G., **50,** (665).
Owens, O. G., **48,** 9 (40); **49,** 521 (365).
Oxtoby, J. C., **42,** 774 (489); **44,** 467 (347); **45,** 206 (80).

Pabst, M. R., **42,** 3 (**41,** 783).
Palermo, A. J., **44,** 750 (634).
Pall, G., **41,** 314 (195), 763 (628); **42,** 3 (**41,** 633), 772 (633); **43,** 751 (473), 756 (473); **44,** 752 (633), 755 (634); **46,** 572 (403), 866 (887); **47,** 187 (51), 528 (217), 841 (859), 843 (688); **48,** 805 (827), 808 (827); **49,** 831 (850); **50,** 808 (666).
Palmer, T. P., **44,** 751 (634).
Parker, W. V., **43,** 756 (473), 756 (474); **45,** 495 (355); **49,** 834 (688).
Pate, R. S., **47,** 521 (376), 840 (685); **48,** 7 (32); **50,** 809 (496), 810 (495).
Patterson, W. A., **46,** 199 (52).
Paxson, E. W., **41,** 314 (195); **42,** 146 (**41,** 800), 460 (315), 774 (633); **43,** 8 (**42,** 822), 442 (204); **44,** 162 (41), 753 (492); **46,** 571 (427).
Paydon, J. F., **45,** 808 (681); **47,** 839 (862); **48,** 194 (40).
Peach, M. O., **49,** 834 (862).
Peebles, G. H., **45,** 49 (**44,** 785), 494 (372), 806 (677); **47,** 520 (387).
Peiser, A. M., **50,** 318 (182), 472 (342).
Pepper, P. M., **42,** 148 (23); **46,** 579 (427); **48,** 502 (373); **49,** 193 (56).
Perez, F., **47,** 4 (**46,** 894).
Perkins, F. W., **41,** 157 (20); **46,** 868 (758).
Perlin, I. E., **42,** 3 (**41,** 634); **45,** 808 (677); **46,** 573 (427); **47,** 183 (40), 840 (700).
Perlis, S., **44,** 460 (356); **46,** 571 (428); **47,** 522 (376); **48,** 194 (33); **50,** 161 (53).
Peters, J. W., **48,** 192 (49).
Peterson, T. S., **46,** 715 (611).
Petrie, G. W., **41,** 159 (27).
Pettis, B. J., **43,** 313 (177); **44,** 6 (**43,** 768), 307 (192), 755 (486); **45,** 206 (88), 811 (677), 811 (677); **46,** 866 (748).
Phillips, R. S., **45,** 494 (372), 495 (372); **46,** 199 (52), 370 (231); **47,** 840 (700); **48,** 193 (30).
Pinney, E. J., **45,** 196 (80); **48,** 9 (41), 496 (365), 496 (365).
Piranian, G., **49,** 519 (218), 519 (537).
Pitcher, A. E., **42,** 158 (40); **43,** 306 (167), 756 (624); **45,** 194 (**44,** 784), 205 (80), 806 (677), 810 (678); **46,** 371 (403), 866 (887); **47,** 528 (376).
Pollard, H., **48,** 5 (**47,** 700), 336 (214), 494 (365), 494 (365); **49,** 834 (538); **50,** 21 (**49,** 853), 320 (182), 808 (671), (824).
Polya, G., **46,** 868 (758); **47,** 339 (207), 529 (558); **48,** 492, 503 (366); **49,** 520 (366).
Poor, V. C., **44,** 164 (**43,** 779), 165 (**43,** 779).
Popoff, K., **44,** 752 (642).
Porges, A. E., **46,** 572 (402).
Poritsky, H., **41,** 157 (20); **42,** 772 (634),

776 (633), 776 (634); **44**, 755 (643); **46**, 864 (887); **48**, 806 (832); **49**, 831 (859).
Post, E. L., **42**, 2 (41, 796); **43**, 3 (42, 810); **50**, 318.
Pounder, J. R., **50**, (826).
Prager, W., **48**, 192 (46); **49**, 830 (693).
Prenowitz, W., **41**, 3 (40, 795); **46**, 4 (45, 837); **48**, 4 (47, 864).
Price, G. B., **41**, 157 (21); **43**, 3 (42, 808); **44**, 162 (41), 755 (635); **45**, 204 (81); **46**, 6 (32), 197 (52); **47**, 834; **48**, 6, 176; **49**, 518 (46).
Puckett, W. T., **42**, 293 (182); **43**, 314 (178); **44**, 467 (201), 470 (201); **45**, 208 (81), 490 (372), 809 (678); **46**, 568 (428), 866 (883), 867 (755); **47**, 517 (398).
Purcell, E. J., **46**, 7 (33), 864 (758); **49**, 194 (56); **50**, 162 (64).

Quine, W. V., **41**, 456 (338).

Rademacher, H. A., **41**, 161 (33); **42**, 4 (41, 785), 772 (634), 775 (634); **43**, 157 (41), 306 (43); **44**, 470 (347), 755 (635); **45**, 199; **46**, 581 (428); **47**, 341 (217), 834; **48**, 494 (366).
Radó, T., **41**, 459 (198); **42**, 456, 458 (187), 458 (186), 459 (187); **43**, 156 (42, 813), 752 (624); **44**, 164 (43, 769); **45**, 490 (373), 495 (373), 495 (373); **46**, 196 (33), 571 (222), 571 (231); **47**, 520 (207), 529 (387); **48**, 501 (366); **49**, 518 (364), 518 (373); **50**, 474 (497).
Rainich, G. Y., **41**, 156 (19), 459 (342), 754; **42**, 457 (324), 458 (323); **43**, 447 (189); **44**, 163 (42); **47**, 6 (32); **48**, 193 (41); **50**, 30 (54).
Rainville, E. D., **42**, 293 (182); **44**, 459 (347), 460 (347); **45**, 194 (44, 784), 494 (373), 495 (374), 495 (374).
Ramsay, B. P., **48**, 808 (668).
Randels, W. C., **41**, 309 (39), 309 (41), 759 (626), 762 (626); **42**, 162 (27), 452 (333); **43**, 447 (185); **44**, 8 (43, 770), 164 (42), 460 (335); **45**, 490 (374); **46**, 6 (33); **47**, 520 (387).
Randolph, J. F., **41**, 2 (40, 793), 453 (202), 760 (623); **42**, 160 (34); **43**, 154 (32), 753 (622); **44**, 162 (43, 769), 306 (192); **46**, 3 (45, 837), 865 (888); **50**, 22 (49, 856).
Rannie, W. D., **47**, 174 (46).
Raudenbush, H. W., **42**, 159 (40); **45**, 809 (679).
Rawles, T. H., **41**, 312 (191); **42**, 150.
Raynor, G. E., **46**, 4 (33).
Reade, M., **44**, 308 (185), 750 (490); **45**, 207 (85), 494 (357); **48**, 5 (47, 862), 192 (36), 194 (41); **49**, 193 (46), 193 (46); **50**, 474 (336), 474 (343), 475 (336), 475 (343).
Recht, L., **46**, 371 (230).
Reed, F. W., **44**, 467 (348).
Reed, I. S., **50**, 477 (497).
Reed, S. G., **49**, 193 (61).
Rees, C. J., **43**, 312 (178); **46**, 3 (45, 837).
Regan, F., **41**, 761 (629); **42**, 160 (24), 293 (182).
Reichelderfer, P. V., **45**, 495 (373); **46**, 196 (33), 571 (231); **48**, 501 (366).
Reid, W. T., **41**, 159 (30), 159 (30), 312 (191), 459 (341), 759 (788); **42**, 458 (321), 771 (635); **43**, 3 (42, 809), 444, 448 (200), 448 (330); **44**, 165 (42), 752 (635); **45**, 207 (72), 208 (81), 494 (374), 807 (679), 810 (678); **46**, 868 (888); **47**, 522 (558); **48**, 806 (829); **50**, 30 (59).
Reingold, H., **41**, 458 (340); **42**, 148 (41, 794).
Reissner, E., **46**, 198 (52), 372 (231); **47**, 186 (46), 842 (704); **50**, 809 (673).
Reves, G. E., **48**, 191 (42).
Reynolds, C. N., **41**, 159 (29); **48**, 808 (836).
Riabouchinsky, D., **44**, 751 (636).
Riblet, H. J., **45**, 339 (232); **46**, 3 (45, 838), 370 (232), 579 (428); **47**, 530 (376).
Richardson, M., **41**, 312 (42); **43**, 753 (474); **50**, 811 (673).
Richter, C. F., **48**, 495.
Rickart, C. E., **47**, 520 (387); **49**, 342 (62), 831 (857); **50**, 318 (182).
Riesz, F., **41**, 759 (628).
Rietz, H. L., **41**, 759 (627); **43**, 5; **44**, 8 (28).
Rigby, F. D., **44**, 8 (28).
Rinehart, R. F., **42**, 148 (41, 791); **44**, 164 (42); **45**, 194 (81).
Riordan, J., **42**, 772 (493).
Risselman, W. C., **42**, 158 (31); **44**, 166 (43).
Ritt, J. F., **42**, 3 (41, 785), 159 (41); **43**, 756 (624); **44**, 470 (348); **45**, 5, 491 (236), 808 (520), 808 (521), 809 (679); **46**, 868

(758); 47, 834; 48, 5 (47, 862), 169; 49, 27 (48, 827).
Robbins, H. E., 42, 771 (635); 44, 753 (636); 50, 319 (191), 320 (182).
Roberts, J. H., 41, 453 (330); 42, 162 (32); 43, 153 (32); 44, 467 (348), 755 (643), 755 (643); 45, 490 (374); 46, 3 (45, 838), 371 (222), 580 (428); 48, 492 (376).
Robertson, F., 46, 6 (33).
Robertson, H. P., 42, 145 (41, 797), 601, 602 (483).
Robertson, M. S., 41, 148 (40, 807), 160 (31), 160 (31), 160 (31), 312 (191), 459 (341); 42, 3 (41, 785), 4 (41, 785), 454 (333), 454 (333); 43, 154 (39), 306 (168); 44, 470 (201); 45, 48 (44, 786), 491 (375), 810 (679); 47, 530 (558).
Robinson, C. V., 46, 6 (45, 832); 47, 184 (47); 48, 7 (47, 864).
Robinson, G. de B., 41, 758 (488).
Robinson, L. B., 41, 158 (24); 42, 3 (41, 785), 293 (183), 455 (334); 43, 4 (42, 809), 157 (42), 314 (178), 756 (624); 44, 6 (43, 768), 308 (193), 470 (348); 45, 208 (90); 46, 372 (403), 868 (759); 47, 4 (46, 894), 4 (46, 895), 530 (559).
Robinson, N., 47, 184 (214), 839 (561).
Robinson, R., 41, 157 (22); 42, 161 (37), 773 (635).
Robinson, R. M., 41, 4 (40, 799); 42, 452 (334), 773 (635); 44, 10 (43, 776); 45, 195 (44, 644), 498 (375); 46, 8 (52), 716 (611), 868 (759); 47, 174 (51); 48, 9 (42); 49, 27 (48, 830), 520 (218); 50, 476.
Robinson, S. L., 41, 453 (337); 43, 152 (33).
Rochford, M. D. P., 48, 808 (521), 808 (521).
Rodabaugh, L. D., 45, 490 (521).
Roettinger, I., 50, 475 (345).
Roever, W. H., 43, 7 (42, 820), 445 (329); 48, 194 (219), 502 (367); 49, 200 (54), 200 (56).
Rommel, J. D., 48, 502 (522).
Roos, C. F., 41, 151.
Rosenbaum, B., 42, 2 (41, 634), 452 (334); 46, 3 (45, 838).
Rosenbloom, P. C., 47, 340 (203); 48, 805 (830); 49, 831 (689); 50, 808 (671).
Rosenthal, A., 47, 842 (701).
Rosenthal, J. E., 46, 370 (232); 47, 4 (46, 895).
Rosenthall, E., 46, 868 (759); 49, 200 (40), 200 (40).
Ross, A. E., 43, 446 (196); 45, 807 (679); 48, 502 (518); 49, 518 (362), 832 (863).
Rosser, J. B., 41, 158 (24), 454 (332); 42, 770 (494), 775 (343); 43, 156 (42, 814), 313 (178), 756 (474); 44, 163 (43), 166 (43), 306 (193); 45, 339 (90), 341 (90), 809 (523); 46, 198 (53), 581 (429); 47, 5, 184 (51), 528 (383), 529 (554); 48, 193 (51).
Roth, W. E., 41, 160 (40, 804), 458 (199), 460 (44); 42, 159 (42); 43, 446 (44); 45, 808 (679).
Rothe, E. H., 44, 8 (43, 777), 162 (43), 458 (349); 45, 194 (44, 785).
Rusk, E. C., 41, 759 (629); 43, 313 (180); 44, 468 (350).
Russell, H. N., 43, 2.
Rutt, N. E., 47, 183 (32), 186 (56).

Sadowsky, M. A., 48, 503 (360).
Safford, F. H., 44, 6 (43, 476); 50, 320 (182).
Sagen, O. K., 42, 459 (325); 44, 306 (193).
Saks, S., 42, 774 (489).
Salem, R., 47, 341 (207), 341 (208), 528 (388), 531 (388), 842 (701); 48, 336 (214), 805 (522), 808 (668); 49, 193 (46), 343 (219), 834 (690); 50, 318 (179), 320 (183), 320 (183), (824).
Salzer, H. E., 48, 494 (363); 49, 27 (48, 828), 27 (48, 520), 200 (58), 515 (539), 834 (688); 50, 22 (49, 694), 22 (49, 698), 32 (55), 320 (62), 320 (188), 472 (342), 810 (499), 811 (499), 811 (499).
Samelson, H., 48, 493 (523), 806 (676), 807 (676).
Sard, A., 47, 186 (40).
Sasuly, M., 41, 151.
Satterthwaite, F. E., 48, 805 (674); 50, 808 (678).
Savage, L. J., 47, 521 (394).
Schaeffer, A. C., 43, 752 (474); 44, 459 (349), 752 (626); 45, 493 (234), 495 (237), 808 (680); 46, 8 (53), 568 (429); 47, 173, 839 (694); 48, 495 (212); 49, 194 (48, 215).
Schafer, A. T., 50, 29 (49, 865).
Schafer, R. D., 48, 502 (360).
Schatten, R., 48, 4 (47, 862); 49, 515 (366).

Scheffé, H., **41,** 459 (348); **47,** 341 (216), 517 (396), 522 (388); **48,** 805 (523), 808 (674); **49,** 343 (221), 834 (698); **50,** 471 (348).
Scherk, P., **46,** 372 (232), **47,** 4 (**46,** 895), 340 (215); **48,** 502 (355); **50,** 811 (677).
Schilling, O. F. G., **43,** 315; **44,** 162 (43), 166 (44), 166 (44), 470 (349); **45,** 205 (**44,** 789), 208 (77), 340 (231), 491 (375); **46,** 4 (**45,** 523), 580 (423); **47,** 530 (375), 530 (375), 530 (375), 834; **48,** 169, 192 (32), 194 (32), 194 (33); **50,** 811 (496), 811 (496).
Schmidt, F. K., **46,** 372 (232).
Schneckenburger, E. R., **45,** 807 (680).
Schoenberg, I. J., **41,** 3 (**40,** 794), 157 (23), 310 (186); **42,** 160 (32), 453 (334), 455 (335), 771 (632); **43,** 306 (168), 313 (179); **44,** 163 (44), 468 (349), 470 (350); **45,** 205 (79), 810 (680); **46,** 197 (53), 865 (888), 866 (881); **47,** 339 (389), 341 (208); **48,** 4; **50,** (825), (826).
Schoenfeld, L. I., **50,** 471 (343).
Schwartz, A., **46,** 2 (**45,** 680); **47,** 839 (708).
Schwartz, H. M., **44,** 470 (350); **45,** 491 (375); **47,** 186 (40), 186 (40), 518 (389); **48,** 194 (42), 503 (367); **49,** 200 (46), 834 (857).
Schweigert, G. E., **43,** 153 (**42,** 813), 313 (179); **44,** 9 (**43,** 774), 753 (636); **45,** 204 (82), 495 (376); **46,** 197 (53), 579 (429); **47,** 185 (56), 522 (399); **49,** 518 (374), 519 (374); **50,** 30 (65).
Schweitzer, A. R., **43,** 4 (**42,** 809), 7 (**42,** 819), 156 (33), 306 (43), 756 (475), 756 (475); **44,** 166 (**43,** 769), 755 (489); **45,** 208 (**44,** 789); **46,** 4 (**45,** 681), 4 (**45,** 681), 581 (233), 868 (759); **48,** 5 (**47,** 709), 194 (51), 337 (211), 503 (219), 503 (220), 808 (834); **49,** 834 (690), 834 (690); **50,** 32 (59), 320 (183), 320 (183), 811 (497), 811 (498), 811 (498).
Schwerdtfeger, H., **48,** 808 (519); **49,** 344 (217).
Scott, W. M., **47,** 528 (376); **49,** 193 (39).
Scott, W. R., **47,** 520 (389).
Scott, W. T., **44,** 750 (630); **45,** 205 (82), 494 (376), 807 (521), 809 (523); **46,** 5 (**45,** 838), 200 (53), 373 (233); **47,** 6 (**46,** 895), 6 (**46,** 896), 521 (208), 521 (389).
Sealander, C. E., **44,** 8 (28); **46,** 197 (54).
Sears, W. R., **47,** 174 (45).
Segal, I. E., **46,** 370 (229), 579 (606); **47,** 4 (**46,** 896).
Seidel, W., **42,** 453 (335); **44,** 308 (193), 470 (350); **46,** 575.
Seidenberg, A., **50,** 809 (500).
Senior, J. K., **43,** 757 (617).
Serbin, H., **46,** 581 (605); **47,** 185 (41).
Serghiesco, S., **44,** 752 (636).
Seward, D. M., **45,** 490 (376).
Sewell, W. E., **41,** 158 (**40,** 800), 160 (26); **42,** 158 (25), 158 (40), 774 (342); **43,** 154 (**42,** 489), 156 (**42,** 494), 156 (**42,** 814), 156 (40), 314 (181), 756 (466), 756 (624), 779; **44,** 164 (45), 166 (**43,** 779), 470 (202), 470 (202), 752 (493); **45,** 491 (237), 491 (237); **46,** 5 (**45,** 523), 5 (**45,** 523), 5 (**45,** 524), 582 (434), 868 (606).
Shanks, M. E., **43,** 447 (200); **47,** 521 (399); **48,** 7 (54); **50,** 30 (64), 31 (**49,** 867).
Shaw, A. A., **42,** 602 (345); **43,** 8 (**42,** 821); **44,** 9 (**43,** 774); **45,** 195 (**44,** 777), 196 (**44,** 777).
Sheffer, I. M., **41,** 454 (332); **42,** 452 (335), 774 (636); **43,** 312 (179), 865 (888); **47,** 524; **49,** 200 (47).
Shephard, R. W., **43,** 442 (205); **46,** 568 (430).
Sherman, S., **46,** 198 (54), 370 (233); **49,** 834 (694); **50,** 809 (500).
Shewhart, W. A., **47,** 334.
Shiffman, M., **43,** 312 (179); **44,** 752 (637), 755 (637); **46,** 581 (430); **48,** 808 (830); **50,** 21 (**49,** 857).
Shohat, J. A., **41,** 311 (188), 455 (336); **42,** 3 (**41,** 786), 450; **43,** 156 (33), 313 (180); **44,** 470 (350); **45,** 49 (**44,** 774), 205 (82), 208 (82), 489 (376), 490 (377); **47,** 341 (209), 529 (390); **49,** 28 (**48,** 831); **50,** 21 (**49,** 863), 471 (346).
Shover, C. G., **42,** 453 (336).
Siegel, C. L., **42,** 4 (**41,** 633), 4 (**41,** 633), 4 (**41,** 634).
Sigley, D. T., **43,** 6 (**42,** 816); **46,** 6 (34), 197 (**45,** 839).
Silverman, L. L., **42,** 773 (636); **43,** 311 (180); **48,** 336 (215).
Simmons, H. A., **41,** 310 (187), 458 (339); **44,** 166 (45); **45,** 808 (681); **47,** 6 (51), 521 (377), 522 (377), 843 (688).
Simond, R. G., **43,** 445 (199).

Singer, J., **41**, 3 (**40**, 796).
Sinkov, A., **41**, 310 (42), 453 (328); **42**, 2 (**41**, 786), 292 (183), 453 (336); **43**, 306 (168); **45**, 340 (232).
Slade, J. J., **48**, 806 (832).
Slotnick, M. M., **46**, 189.
Smiley, D. M., **41**, 314 (196); **43**, 441 (202); **45**, 48 (**44**, 642); **48**, 808 (665).
Smiley, M. F., **43**, 446 (188); **44**, 162 (29), 162 (45); **45**, 805 (521); **46**, 199 (54), 373 (233); **47**, 186 (32), 341 (377), 528 (376); **48**, 191 (33), 194 (211), 494 (360), 494 (367), 808 (367); **50**, 318 (184), 475 (335).
Smith, A. H., **49**, 193 (45).
Smith, C. D., **44**, 751 (637).
Smith, E. R., **46**, 6 (34).
Smith, F. C., **44**, 164 (**43**, 779); **45**, 204 (82).
Smith, H. W., **46**, 197 (54).
Smith, P. A., **44**, 306.
Snapper, E., **47**, 340 (203); **48**, 4 (**47**, 858); **49**, 26 (**48**, 827).
Snively, H. D., **46**, 864 (887).
Snyder, V., **41**, 759 (629); **43**, 313 (180); **44**, 468 (350).
Snyder, W. S., **46**, 572 (430); **47**, 183 (41); **48**, 501 (368); **49**, 200 (47), 518 (366).
Sobczyk, A., **45**, 805 (682); **49**, 832 (691).
Sokolnikoff, E. S., **41**, 459 (199); **44**, 166 (45), 458 (351).
Sokolnikoff, I. S., **41**, 459 (199); **44**, 166 (45), 458 (351); **47**, 520 (391); **48**, 184; **50**, 473.
Sorgenfrey, R. H., **45**, 341 (83); **47**, 184 (56); **48**, 194 (55).
Spencer, D. C., **46**, 197 (55), 581 (430), 582 (431), 865 (750), 868 (889); **47**, 843 (692), 844 (701); **48**, 805 (522).
Spencer, D. E., **48**, 805 (672); **49**, 343 (57).
Spencer, V. E., **41**, 760 (623); **42**, 3 (**41**, 786); **45**, 340 (90), 490 (377).
Spitzbart, A., **47**, 187 (41).
Springer, C. E., **43**, 753 (475); **49**, 193 (57).
Staniland, A. E., **42**, 773 (636); **44**, 5 (**43**, 625).
Starkey, D. M., **44**, 164 (46).
Steenrod, N. E., **42**, 453 (336); **44**, 163 (40), 467 (348); **45**, 807 (682); **47**, 522 (399), 841 (866); **50**, 474 (349), 806 (679).
Stephens, C. F., **50**, 475 (343).
Stephens, E., **44**, 166 (46).
Stephens, R. C., **47**, 341 (218).
Sternberg, W., **46**, 3 (**45**, 682), 371 (403); **50**, 318 (59).
Stewart, B. M., **47**, 521 (378).
Stewart, H. J., **47**, 174 (46), 517.
Stoker, J. J., **42**, 148 (**41**, 792); **44**, 307 (194), 308 (194); **45**, 205 (70); **47**, 334.
Stoll, R. R., **50**, 21 (**49**, 850), 808 (666).
Stone, A. H., **49**, 518 (222); **50**, (828).
Stone, D. M., **47**, 339 (206); **50**, 30 (**49**, 850), 31 (**49**, 857).
Stone, M. H., **42**, 776 (489); **44**, 464; **45**, 802; **47**, 834.
Stopher, E. C., **43**, 445 (193), 448 (198).
Stouffer, E. B., **43**, 6 (**42**, 817).
Strodt, W. C., **43**, 306 (168); **44**, 307 (194); **49**, 342 (47).
Struik, D. J., **43**, 155 (40); **44**, 3, 864 (760).
Struik, S. R. R., **44**, 5 (**43**, 778), 6 (**43**, 778); **45**, 205 (83); **48**, 805 (674), 805 (834), 808 (833).
Suckau, J. W. T., **44**, 458 (351).
Sugar, A., **42**, 145 (**41**, 796), 146 (**41**, 801), 162 (27), 602 (344), 775 (636); **43**, 8 (**42**, 824), 156 (33), 442 (206), 443 (208); **45**, 206 (83); **46**, 582 (431); **47**, 341 (215).
Sullivan, C. T., **43**, 314 (180).
Sutton, R. M., **47**, 529 (392).
Swain, R. L., **45**, 341 (91); **47**, 184 (56), 187 (55), 187 (56); **48**, 503 (376); **49**, 193 (62).
Swanson, A. G., **41**, 759 (788).
Swinford, L. H., **44**, 462 (351); **47**, 517 (390).
Swingle, P. M., **45**, 498 (377); **46**, 715 (611), 716 (611); **47**, 174 (57), 185 (57); **48**, 9 (55).
Synge, J. L., **41**, 158 (**40**, 804), 161 (**40**, 804); **42**, 150, 161 (38); **43**, 313 (181); **45**, 5; **46**, 580 (431); **48**, 192 (47); **49**, 24; **50**, 473.
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Pierpont, J. See Ore, O.
Price, G. B. *Mathematical Reviews offers a reading machine for microfilm*, **47**, 1.
Putnam, T. M. *Derrick Norman Lehmer—in memoriam*, **45**, 209.
—— *Reports of meetings of the American Mathematical Society*: **41**, 313; **42**, 460, 601; **43**, 7, 441; **44**, 9, 461; **45**, 1, 195, 497; **46**, 7, 567, 715; **47**, 173, 517; **48**, 8.

Richardson, R. G. D. *The Society establishes a new periodical*, **45**, 641.
—— *The Society's prizes*, **46**, 367.
—— *Reports of meetings of the American Mathematical Society*: **41**, 753; **42**, 761; **43**, 305; **45**, 1.
—— See Murphy, R. D.

Schlesinger, F. *Ernest William Brown—in memoriam*, **45**, 343.
Slaught, H. E. See Bliss, G. A.
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Snyder, V. *John Irwin Hutchinson—in memoriam*, **42**, 164.
—— *John Henry Tanner—in memoriam*, **46**, 374.
—— *Earle Raymond Hedrick—in memoriam*, **49**, 345.
Stone, M. H., and Kline, J. R. *Mathematicians and the new selective service regulations*, **50**, 1.

Tamarkin, J. D. *Twenty-five volumes of Fundamenta Mathematicae*, **42**, 300.
Tanner, J. H. See Snyder, V.
Tucker, A. W. *The Topological Congress in Moscow*, **41**, 764.
Tyler, H. W. See Phillips, H. B.

Van Vleck, E. B. *Ernest Brown Skinner—in memoriam*, **41**, 593.
—— See Birkhoff, G. D.

Walker, R. J. *Report of the New York conference on algebraic geometry*, **43**, 315.
Wells, M. E. *Henry Seely White—in memoriam*, **49**, 670.
Weyl, H. *David Hilbert and his mathematical work*, **50**, 612.
White, H. S. See Wells, M. E.
Whyburn, W. M. *Raymond Joseph Garver—in memoriam*, **42**, 163.
Winger, R. M. *Robert Edouard Moritz—in memoriam*, **47**, 188.
Work Projects Administration. *Announcement of the project for the computation of mathematical tables*, **47**, 363.

Youngs, J. W. T. *Report of a meeting of the American Mathematical Society*: **50**, 473.